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Pre-Remedial  
Unit

# CERCLA

## Preliminary Assessment Report



Illinois Environmental  
Protection Agency

P.O. Box 19276,  
Springfield, IL 62794-9276

RELEASED  
DATE 9/12/96  
RIN # 2324  
INITIALS J.P.

*Confidential Material May be Enclosed*

## Executive Summary

Insta Foam was placed into the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) on \*\*\*\*\*, 1990. It was placed into the system due to the discovery of contaminants historically dumped within the confines of the quarry.

The Insta-Foam site occupies an area of approximately nine acres on Broadway Street (U.S. Route 53) in the City of Crest Hill, Illinois in Will County. The property is bordered on the north by a 100 foot right of way of the main line of the Elgin, Joliet, & Eastern Railway company, on the east by Broadway Street (US Route 53), on the south by Chaney Avenue, and on the west by a residential housing area. The majority of land use to the north and east is industrialized or agricultural.

The site was originally a limestone quarry operation. The former quarry pit, which occupied approximately four acres in the center of the property, has been backfilled with a variety of materials, including oily wastes and fire debris. With the exception of two, the buildings were constructed since 1979 by Insta-Foam.

Historically, the site was operated as a limestone quarry, which occupied approximately four acres in the center of the property, from the late 19th century until the 1920s. After this, a number of specialty wood products (cabinetry, sash, and door manufacturers) and lumber milling operations occupied the site until the early 1960s. Jack Carlestrom then reportedly bought the property and used the quarry as a disposal site for his Lockport Trucking Company. In early 1972, a foam insulated pipe manufacturer called Rovanco occupied the buildings on the site. Insta-Foam gradually acquired the facility from 1972 to 1975, and became a part of Flexible Products in 1984.

Currently, Flexible Products/Insta Foam manufactures a two-component urethane foam system used as a packaging and an insulative material. The two main components are a polyal and tolylene diisocyanate (TDI). Small quantities of primarily toluene and methylene chloride are generated by the laboratory.

Materials disposed into the former quarry from the mid 1960s to the mid 1970s are largely unknown. From 1965 to 1970, the facility was not actively used for manufacturing and was, therefore, not closely supervised by the previous owner. Local newspapers reported that, in the late 1960's, Jack Carlestrom of Lockport Trucking company disposed of tank bottoms from oil storage tanks at a nearby Texaco facility in the former quarry. In addition, debris from a 1972 fire at a

GAF roofing material manufacturing facility in Crest Hill was reportedly placed in the quarry. Subsequent to Insta-Foam's assuming total operation of the facility from Rovanco in the mid-1970s, debris from local roadway and parking lot construction were added to the quarry.

Previous environmental investigations indicated that the quarry was excavated to a depth of approximately 15 to 20 feet below the existing ground surface. All borings within the former quarry encountered debris below the sand, gravel surface. Debris included slag, concrete, wood, and refractory brick. Oily product accumulations were found on top of the water table in two locations. In general, ground water was found to be within 10 feet of the existing ground surface in the quarry area.

Results of sub-surface testing at the Insta-Foam property indicated the presence of a variety of chemical contaminants. TPHC was detected ranging from 4.67 ppm to 92.2 ppm in the groundwater, and up to 103,000 ppm in the soil. Elevated levels of volatile organic compounds (VOCs) were also seen in the soil and groundwater. Material resembling roofing felt was recovered from the augers. The material contained elevated levels of organic compounds, but did not contain asbestos. A black and highly viscous free product was observed to be floating on top of the water table which exhibited a strong petroleum odor. Analysis indicated high levels of polynuclear aromatic hydrocarbons (PAHs).

These materials may be attributed to disposal activities at the site that occurred during the 1960's and early 1970's. The type of contaminants present are consistent with the knowledge that waste materials from Texaco and GAF Corporation were disposed of in the quarry that underlies the site. Drilling logs and knowledge of the quarry structure indicate that the materials present in the landfill are contained on-site. Off-site overland migration and ground water contamination have not been detected at this time.

Groundwater occurrence is primarily within the dolomite bedrock, where flow occurs along fractures, bedding planes, and solution channels. This shallow bedrock aquifer is locally recharged from annual precipitation. Local mounds on the water table occur due to the uneven distribution of permeability in the former quarry fill and dolomite bedrock. One unconfined aquifer was encountered in the former quarry pit where silt and clay dominate the geologic regime and in the fractured dolomite bedrock. Groundwater flow is believed to be in an easterly direction towards the Des Plaines River with some radial flow occurring near the west perimeter of the site.

Site surface drainage on the property is in a northwest direction toward a pond located on the property. Samples from

this pond have reportedly tested clean. Borings and monitoring wells on-site indicate that groundwater is contained in the old quarry and may not have any contact with continuous water-bearing strata in the area. The general topography in the vicinity of the site generally slopes down to the east towards the Des Plaines River approximately 1/4 miles to the east.

The aquifer of concern is located in the Richmond Shale, found under the 100 to 200 foot thick Niagrian Formation. The upper Niagrian formation, covering most of northeast Illinois, consists of thinly bedded, highly weathered, cherty dolomite of a buff yellow color, commonly known as limestone. Drinking water supplies for residential areas located west and northwest of the site are provided by the City of Crest Hill. Crest Hill (pop. 10,000) has five supply wells in operation which draw water from a depth of around 300 feet. The closest of the municipal wells is approximately 1/2 of a mile due west of the site. Drinking water for residential areas west, southwest and south of the site are provided by the City of Joliet, which draws its water from wells located over 1.5 miles from the site. However, the companies and area directly north of the site is supplied by private wells.

The population around the site is as follows:

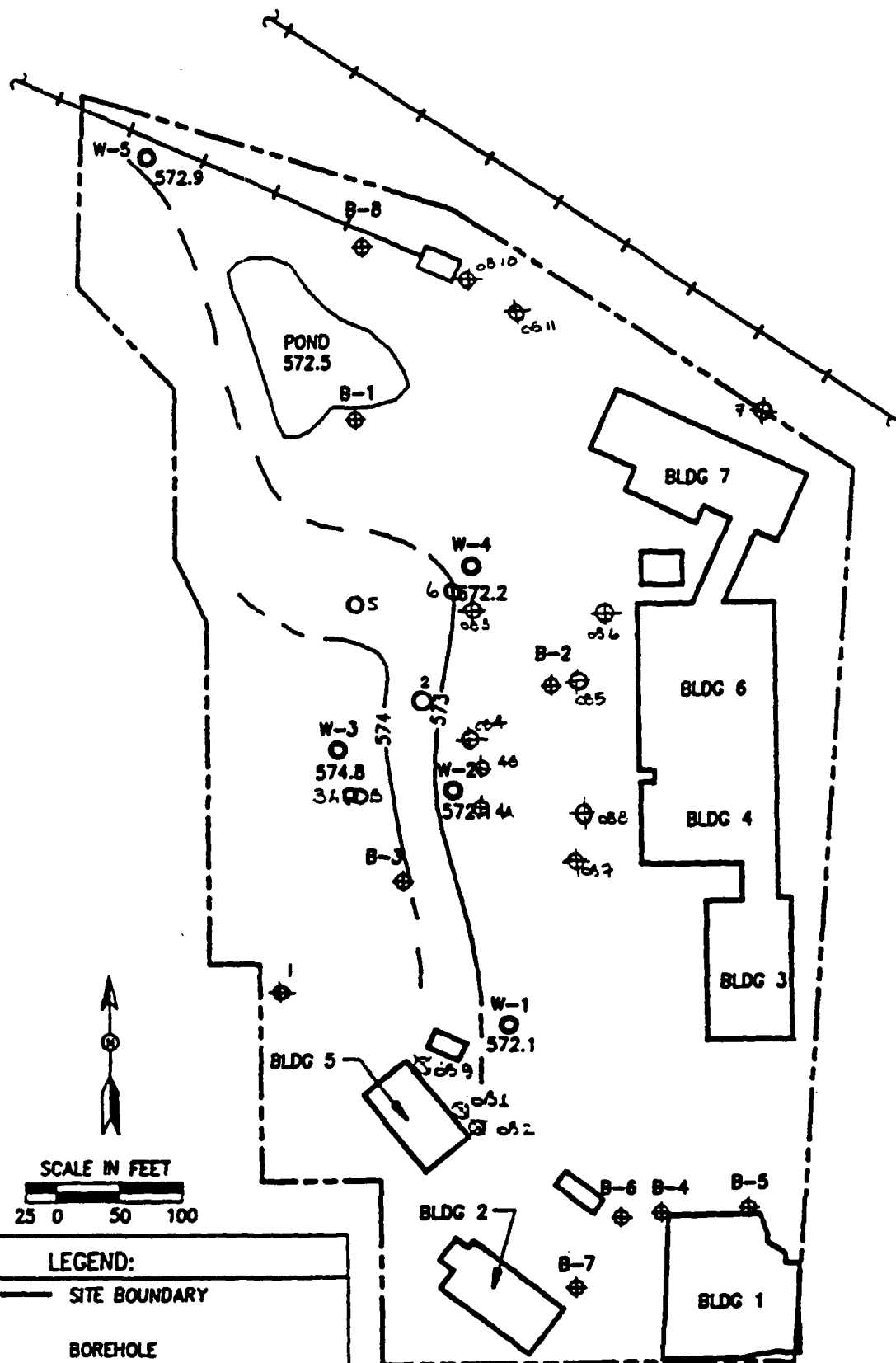
Resident Population	Population served by wells
On-site - 80	On-site - 0
0 - 1/4 mile - 1200	0 - 1/4 mile - 0
1/4 - 1/2 mile - 1900	1/4 - 1/2 mile - 2006
1/2-1 mile - 3806	1/2-1 mile - 1956
1 - 2 miles - 23788	1 - 2 miles - 7006
2 - 3 miles - 34874	2 - 3 miles - 19134
3 - 4 miles - 38380	3 - 4 miles - 86787

The Seeler Industries site (HCl and H<sub>2</sub>O<sub>2</sub> transfer) lies between Insta-Foam and the Des Plaines River. The Seeler facility has two wells which are used for diluting purposes following purification. These wells draw from depths estimated at 150 feet or more in the confined bedrock.

Insta-Foam employs 50-80 people who visit the site on a daily basis. A residential area is located on a ridge adjacent and above this property. There are several commercial establishments also located nearby. Site access is not limited other than by gates across the main entrances.

If the material is confined within the boundaries of the quarry, it would possess little potential for impacting the population or ecosystems. However, insufficient information is available to conclusively determine if a release has occurred or may occur.

Therefore, due to the close proximity of municipal water supply wells and private wells, the author has assigned a medium priority rating to this site and recommends that the Region V office of the USEPA task a screening site inspection when time is available.



# LEGEND:

--- SITE BOUNDARY

B-7

◆

BOREHOLE

W-1

○

WELL

572.1

WATER LEVEL ELEVATION

OF 7/22/88 (FT.-AMSL)

CONTOUR OF EQUAL WATER

LEVEL ELEVATION (DASHED

WHERE APPROXIMATE)

--- 573 ---

DRAWINGS ARE APPROXIMATE

INSTA-FOAM PRODUCTS, INC.  
CREST HILL, IL  
WATER LEVEL ELEVATION DATA

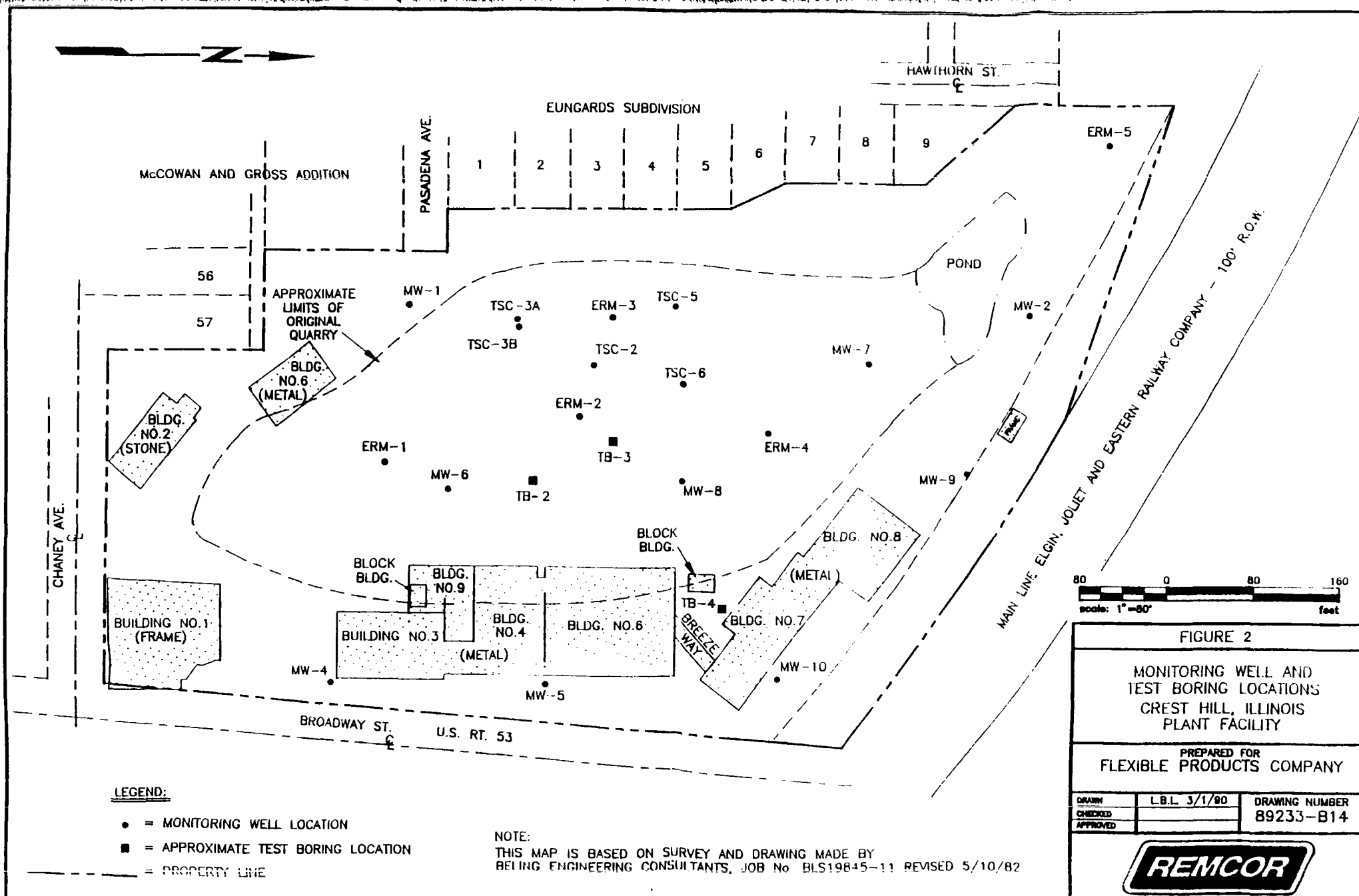
FIGURE

3

9/1/88

ERM ERM-North Central, Inc.

CS



Crest Hill/Insta-Foam Products, Inc.  
1970455016 - Will Co.

July 7-13, 1988 Sampling Event -ERM (NET)  
Quarry Fill Samples

Tests Performed:

VOCs: W1B, W2D, W3B, W4A, W5A

BNA: W1B, W1E, W2D, W2E, W3B, W3C, W4A, W4F, W5A

Total Metals: W1B, W1E, W2D, W2E, W3B, W3C, W4A, W4F, W5A

W1B - 2.5-5.0 ft	W2E - 17.5-20 ft	W4A - 0-2.5 ft
W1E - 15-20 ft	W3B - 2.5-7.5 ft	W4F - 15-17.5 ft
W2D - 15.0-17.5 ft	W3C - 10 - 12.5 ft	W5A - 0-1.8 ft

Parameter (ppb)	W1B	W2D	W3C	W4F
Naphthalene	--	--	18900	--
Dibenzofuran	--	--	--	12000
Acenaphthene	--	--	--	23000
Fluorene	--	--	--	16000
Phenanthrene	2800	5900	26000	57000
Anthracene	--	--	--	16000
Fluoranthene	3600	5000	--	40000
Benzo(k)flrnthne	--	--	--	15000
Benzo(b)flrnthne	--	--	--	17000
Pyrene	2800	--	7000	32000
Benzo(a)anthracene	1300	--	--	16000
Chrysene	1400	--	9000	16000
Benzo(a)pyrene	--	--	--	13000

Parameter (ppb)	W1B	W1E	W2D	W2E	W3B
Cyanide	60	--	410	--	un-
Aluminum	4450000	5060000	5120000	1700000	read-
Arsenic	2100	1100	1400	1000	able
Barium	63600	40000	180000	14200	*
Cadmium	--	--	--	--	--
Calcium	117000000	150000000	899000000	13800000	113000000
Chromium	13800	12.500	10500	3690	15800
Copper	67800	20000	67800	3980	19200
Iron	12700000	23800000	16600000	4830000	16900000
Lead	191000	35000	484000	--	49600
Magnesium	65700000	92600000	49800000	11200000	48500000
Manganese	456000	726000	346000	34100	485000
Mercury	70	--	80	--	--
Nickel	21200	30000	33200	17000	20300
Potassium	615000	1200000	1160000	1240000	711000
Silver	2540	--	500	--	1600
Sodium	244000	163000	277000	142000	214000
Thallium	25400	30000	11100	--	18000
Zinc	127000	53800	387000	13100	1240000



July 7-13, 1988 Sampling Event -ERM (NET) continued

Parameter (ppb)	W3C	W4A	W4F	W5A
Cyanide	510	160	340	140
Aluminum	4530000	12700000	4570000	4020000
Arsenic	910	3700	--	2200
Barium	36300	69700	21800	82500
Cadmium	1810	3740	1360	--
Calcium	102000000	62300000	43500000	119000000
Chromium	199000	16200	32600	10000
Copper	54400	660000	25800	15200
Iron	11600000	19900000	8970000	18500000
Lead	598000	174000	54400	60800
Magnesium	56200000	34900000	25800000	72800000
Manganese	290000	610000	163000	815000
Mercury	150	50	--	--
Nickel	32600	572000	38100	28200
Potassium	689000	1460000	286000	912000
Sodium	326000	473000	462000	195000
Thallium	--	2000	--	17400
Zinc	1160000	149000	150000	43400

July 14-19, 1988 Sampling Event -ERM (NET)

Tests Performed: Quarry Fill and Building Fill Samples

VOCs: B1C, B2C, B2B, B3C, B4A, B5A, B6B, B7A

BNA: B1C, B1D, B2B, B2E, B3C, B3D, B4A, B5A, B6B, B7A

Total Metals: B1C, B1D, B2B, B2E, B3C, B3D, B4A, B5A, B6B, B7A

Quarry Area Fill Samples: B1C, B1D, B2B, B2E, B3C, B3D

Building Fill Samples: B4A, B5A, B6A, B7A

B1C - 0-2.5 ft	B2E - 15-20 ft	B4A - Building Fill
B1D - 12.5-17.5 ft	B3C - 7.5-12.5 ft	B5A - Building Fill
B2B - 5.0-7.5 ft	B3D - 12.5-17.5 ft	B6A - Building Fill

Parameter (ppb)	B2E	B3C	B3D	B4A
Trichloroethene	n/a	--	n/a	3800
Ethylbenzene	n/a	1000	n/a	--
Xylene meta/para	n/a	3100	n/a	--
ortho	n/a	1600	n/a	--
Naphthalene	--	--	77000	--
Dibenzofuran	--	--	15000	--
Acenaphthene	12000	--	22000	--
Anthracene	--	--	11000	--
Fluorene	--	--	40000	--
Fluoranthene	17000	--	--	--
Phenanthrene	25000	18000	156000	--
Pyrene	15000	--	38000	--
Chrysene	--	--	45000	--
Benzo(b)flrnthne	--	--	21000	--
Benzo(a)anthracene	--	--	29000	--
Benzo(a)pyrene	--	--	11000	--

July 14-19, 1988 Sampling Event -ERM (NET) continued

Parameter (ppb)	B1C	B1D	B2B	B2E	B3C	B3D
Cyanide	80	110	280	510	--	--
Aluminum	4230000	1980000	5730000	2270000	2130000	332000
Arsenic	600	--	3400	--	730	1200
Barium	59400	14100	67500	18700	12200	9800
Cadmium	1140	--	1120	--	--	--
Calcium	137000000	170000000	60700000	77400000	134000000	5660000
Chromium	9830	11600	11200	14700	12200	9340
Cobalt	--	8.500	--	--	4900	4900
Copper	18300	12400	43900	11000	14700	1480
Iron	9140000	6220000	27000000	8270000	14700000	1250000
Lead	148000	93300	180000	56000	58600	17200
Magnesium	90300000	105000000	33700000	46700000	83000000	3810000
Manganese	457000	353000	2430000	307000	281000	14800
Mercury	60	--	0150	40	--	--
Nickel	18300	19800	22500	10700	29300	--
Potassium	2060000	806000	1000000	840000	1280000	172000
Silver	--	2800	1600	2700	1700	--
Sodium	308000	368000	326000	133000	256000	221000
Thallium	2300	2800	--	8000	9800	--
Zinc	75400	42400	16900	57400	64700	23400

Parameter (ppb)	B4A	B5A	B6B	B7A
Cyanide	290	1060	1190	80
Aluminum	4650000	6290000	4680000	189000
Arsenic	2200	1100	890	700
Barium	108000	99800	22300	16000
Cadmium	--	1090	--	--
Calcium	103000000	141000000	86900000	56700000
Chromium	15100	13000	13400	8450
Cobalt	4300	--	--	--
Copper	35700	33600	23400	5120
Iron	19500000	11900000	15600000	9570000
Lead	443000	130000	55700	22200
Magnesium	56300000	79200000	54600000	35600000
Manganese	313000	3100	746000	145000
Mercury	60	--	--	--
Nickel	23800	19500	15600	13300
Potassium	497000	629000	779000	1440000
Silver	2400	2600	400	660
Sodium	238000	1520000	122000	801000
Thallium	4300	8680	--	4500
Zinc	162000	89000	60100	41000

July 15-18, 1988 Sampling Event - ERM (NET)  
Quarry Area Groundwater Samples

Tests Performed:

VOCs: W1GW1, W2GW1, W3GW1, W4GW1, W5GW1

BNA: W2GW1, W3GW1, W4GW1, W5GW1

Total Metals: W1GW1, W2GW1, W3GW1, W4GW1, W5GW1

Parameter (ppb)	W2GW1	W3GW1	W4GW1	W5GW1
1,1-Dichloroethene	--	--	2.8	--
Acetone	--	--	25	--
1,1-Dichloroethane	5.8	310	--	--
2-Butanone	--	--	11	--
1,1,1-TCA	2.2	220	--	1.4
Benzene	--	--	4.2	--
Trichloroethene	--	--	--	--
Toluene	--	105	2.8	--
Ethylbenzene	--	--	--	--
Xylene meta/para	--	366	1.1	--
ortho	--	219	1.4	--
Naphthalene	--	1540	--	--
Fluorene	--	450	--	--
Phenanthrene	--	1700	--	--
Pyrene	--	430	--	--
Benzo(a)anthracene	--	380	--	--
Chrysene	--	560	--	--
PCB Arochlor 1254	--	1.7	--	--

Parameter (ppb)	W1GW1	W2GW1	W3GW1	W4GW1	W5GW1
Cyanide	11	4	3	2	3
Arsenic	2	1	3	2	--
Barium	150	100	40	110	50
Calcium	150000	250000	180000	140000	140000
Chromium	23	9	5	13	--
Copper	5	7	7	6	6
Iron	370	2400	960	20	20
Lead	50	20	90	20	--
Magnesium	77000	65000	82000	65000	70000
Manganese	2100	991	637	976	53
Mercury	0.5	0.3	0.2	0.2	0.1
Nickel	20	40	40	20	30
Potassium	8500	14000	1100	6100	4900
Silver	2	5	5	5	--
Sodium	95000	140000	210000	31000	31000
Thallium	50	50	40	30	20
Zinc	10	14	11	11	17

July 18, 1988 Sampling Event -ERM (NET)  
Pond/Sediment Sampling

Tests Performed:

Total Metals: SW1, SD1

VOCs: SW1, SD1

BNA: SW1, SD1

Parameter (ppb)	SW-1 Water	SD1 Sediment
Cyanide	1	210
Aluminum	320	11000000
Arsenic	--	1600
Barium	150	82300
Calcium	500000	69200000
Chromium	15	23100
Cobalt	--	9800
Copper	9	41100
Iron	1900	1200
Lead	--	158000
Magnesium	480000	37900000
Manganese	262	593000
Nickel	--	19800
Potassium	8900	1470000
Silver	--	650
Sodium	41000	152000
Thallium	--	3300
Zinc	92	181000

July 22, 1988 Sampling Event -ERM (NET)  
Groundwater

Tests Performed:

VOCs: W1GW2, W2GW2, W3GW2, W4GW2, W5GW2

BNA: W2GW2, W3GW2, W4GW2, W5GW2

Total Metals: W1GW2, W2GW2, W3GW2, W4GW2, W5GW2

Parameter (ppb)	W1GW2	W2GW2	W3GW2	W4GW2
1,1-Dichloroethene	--	--	--	2.0
1,1-Dichloroethane	--	11	370	--
1,1,1-TCA	--	2.4	250	--
Benzene	--	1.1	--	2.5
Trichloroethene	2.1	--	--	--
Toluene	--	--	190	1.4
Ethylbenzene	--	--	100	--
Xylene meta/para	--	--	465	1.0
ortho	--	--	256	1.2
Naphthalene	--	--	1880	--
di-n-butyl-phthalate	--	--	--	11
Acenaphthene	--	--	--	10
Fluorene	--	--	580	--
Phenanthrene	--	--	2240	31
Fluoranthene	--	--	--	14
Pyrene	--	--	730	17
Benzo(a)anthracene	--	--	640	13
Chrysene	--	--	940	19
PCB Arochlor 1254	--	--	1.5	--
2-Methyl-4,6-dinitrophenol	--	--	2020	--

Parameter (ppb)	W1GW2	W2GW2	W3GW2	W4GW2	W5GW2
Cyanide	3	2	3	4	2
Arsenic	--	--	3	2	--
Barium	120	100	60	80	50
Calcium	?	270000	220000	150000	150000
Chromium	--	8	9	12	2
Copper	?	20	4	--	--
Iron	?	60	3000	100	--
Lead	20	170	--	--	--
Magnesium	?	84000	80000	74000	70000
Manganese	?	1340	1580	715	130
Mercury	--	--	0.3	--	0.1
Nickel	30	70	40	30	10
Potassium	?	11000	11000	10000	4900
Silver	3	5	6	4	5
Sodium	?	180000	190000	31000	26000
Thallium	?	60	50	30	30
Zinc	?	36	30	19	21

October 31, 1988 Sampling Event - Sea Group

Water Test Performed:

VOCs: W2, W3A, W3B, W5, W6 Base Neutrals: All FOGs: All

Parameter	ug/l	W2	W3A	W3B	W5	W6
Cyanide		700	200	<250	<250	<250
FOG		80000	8060000	6240000	190000	2910000
Benzene		--	68.5	116	--	--
1,1-Dichloroethene		11.8	--	--	--	--
Ethyl benzene		--	83	266	--	11.6
Toluene		--	71	55	18.6	22.7
Xylene (Total)		--	226	675	49.8	77.5
Naphthalene		29	11	134	--	143
Benzo(a)anthracene		--	--	34	--	--
Benzo(a)pyrene		--	--	16	--	--
Chrysene		--	--	49	--	--
Anthracene		--	--	11	--	--
Fluorene		--	--	36	--	--
Phenanthrene		34	24	150	--	415
Pyrene		--	--	31	--	--

December 6-13, 1989 Sampling Event - Remcor

Soil Tests Performed:

VOCs (Priority Pltnt): TB1, TB2, TB4, MW7C, MW7A SemiVOCs: All

Parameter	(ug/kg)	TB1	TB2	TB4	MW7C	MW7A
Methylene Chloride		110	--	39	31	73
Acetone		760	230000	1400	4100	82
1,2-Dichloroethane		--	110	--	--	--
1,1,1-Trichloroethane		--	--	--	6	9
Tetrachloroethene		--	--	--	21	87
Benzene		530	--	200	--	--
Toluene		140	--	230	1	--
Ethylbenzene		66	--	40	--	--
Xylene		150	2300	110	--	--
Naphthalene		43000	390	450	140	1000
bis(2eh)phthalate		6700	550	--	200	210
Acenaphthylene		15000	250	49	170	670
Acenaphthene		220000	800	1200	370	15000
Fluorene		200000	890	1000	390	2000
Phenanthrene		1000000	6000	5100	840	6100
Anthracene		330000	1200	1200	280	1400
Fluoranthene		940000	3600	3500	740	3800
Indeno(1,2,3-cd)pyrene		240000	1200	850	250	1200
Benzo(g,h,i)perylene		260000	1400	980	340	1600
Benzo(k)fluoranthene		200000	1000	1100	360	1300
Pyrene		740000	5000	4000	910	5900
Benzo(a)anthracene		390000	1700	1500	310	1800
Benzo(a)pyrene		260000	1300	1200	420	1700
Benzo(b)fluoranthene		270000	1600	1600	430	1700
Chrysene		340000	1700	1500	380	2000
Dibenzo(a,h)anthracene		92000	390	--	--	--

January 4, 1990 Sampling Event - IEPA

Tests Performed

VOAs: All

Semi-VOCs: MW8

Pesticide/PCBs: MW8

EP TOX Metals: MW8

Parameter	(ug/l)	MW1	MW2	MW8	MW9
Trichlorofluoromethane		--	--	1500	83
Isophorone				150	
2-Methylnaphthalene				16	
Naphthalene				20	
Dibenzofuran				14	
Acenaphthene				29	
Fluorene				11	
Phenanthrene				19	
Bis (2-ethylhexyl)phthalate				23	
Di-n-octyl phthalate				24	
Cyanide				--	
Sulfide				7520	
pH				7.05	

January 4, 1990 Sampling Event - Remcor

Tests Performed:

VOCs (Priority Pollutant): MW1, MW2, MW4, MW8, MW9, MW10

SemiVOCs: MW1, MW2, MW4, MW8, MW9, MW10

Total Metals: MW9, MW10

Pesticides/PCBs: MW9, MW10

Parameter	ug/l	MW1	MW2	MW4	MW8	MW9	MW10
Methylene Chloride		--	--	--	32	--	20
Acetone		--	32	60	30	--	25
Benzene		--	--	--	5	11	--
4-Methyl-2-Pentanone		--	--	--	--	12	--
Toluene		--	--	--	4	13	--
Ethylbenzene		--	--	--	--	10	--
Xylene		--	--	--	--	150	--
Di-n-butylphthalate		--	--	--	--	1	--
gamma-BHC (Lindane)		--	--	--	--	0.047	--
Trichlorofluoromethane	6	7	150	1400	--	--	--
Naphthalene		--	--	--	25	--	--
Acenaphthene		--	--	--	35	--	--
Fluorene		--	--	--	20	--	--
Phenanthrene		--	--	--	42	--	--
Fluoranthene		--	--	--	20	--	--
bis(2eh)phthalate	5	7	6	--	--	--	6
Aluminum						--	270
Calcium					113000		223000
Iron					1300		4200
Magnesium					48900		113000
Manganese					650		370
Sodium					23400		21200
Lead					5.4		--
Zinc					270		27

January 5, 1990 Sampling Event - Remcor

Groundwater

Tests Performed:

VOCs (Priority Pollutant): MW2, MW3, MW4, MW5, MW7, MW0

SemiVOCs: MW2, MW3, MW4, MW5, MW7, MW0

Total Metals: MW5

Pesticides/PCBs: MW5

Parameter (ug/l)	MW2	MW3	MW4	MW5	MW7	MW0
Methylene Chloride	8100	1800	--	--	--	--
Acetone	110	78	37	--	8	9
Trichlorofluoromethane	--	--	11	--	6	--
1,1,1-Trichloroethane	--	--	--	3	--	--
Toluene	--	35	--	--	--	--
Ethylbenzene	--	140	--	--	--	--
Xylene	--	510	--	--	--	--
Naphthalene	--	27	--	--	--	--
Phenanthrene	--	73	3	--	--	--
Fluorene	14	21	--	--	--	--
Fluoranthene	--	61	2	--	--	--
Pyrene	--	22	3	--	3	--
Benzo(a)anthracene	15	24	--	--	3	--
Chrysene	18	39	--	--	5	--
bis(2eh)phthalate	17	36	9	6	--	5
Calcium				115000		
Iron				640		
Magnesium				64800		
Manganese				15		
Sodium				17900		
Zinc				1400		



February 13, 1990 Sampling Event

Tests Performed:

Total Lead: Oil

VOCs: TSC

SemiVOCs: Oil

Parameter	ug/kg	Oil	TSC3
Methylene Chloride			25000
Acetone			27000
Tetrachloroethene			710
Lead, Total		1600	
Naphthalene		150000	
2-Methylnaphthalene		450000	
Dibenzofuran		80000	
Fluorene		190000	
Phenanthrene		610000	
Anthracene		57000	
Fluoranthene		49000	
Pyrene		290000	
Chrysene		220000	
bis(2eh)phthalate		120000	
Benzo(b)fluoranthene		77000	
Benzo(k)fluoranthene		42000	
Benzo(a)pyrene		70000	
Benzo(a)anthracene		180000	



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
IL 043912922

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Insta Foam		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER Broadway (U.S. Route 53)			
03 CITY Crest Hill	04 STATE IL	05 ZIP CODE 60435	06 COUNTY Will	07 COUNTY CODE 197	08 CONG DIST 04
09 COORDINATES LATITUDE 32 23 40.0		LONGITUDE -88 05 15.0		Joliet Quad.	
10 DIRECTIONS TO SITE (Starting from nearest public road) Intersection of Broadway (US 53) and Chaney Avenue.					

III. RESPONSIBLE PARTIES

01 OWNER (If known) Insta-Foam (Flexible Products)		02 STREET (Business, mailing, residential) 1500 Cedarwood Dr.			
03 CITY Joliet	04 STATE IL	05 ZIP CODE 60435	06 TELEPHONE NUMBER 1815 741-6800		
07 OPERATOR (If known and different from owner) John Harvish		08 STREET (Business, mailing, residential) 1500 Cedarwood Dr.			
09 CITY Joliet	10 STATE IL	11 ZIP CODE 60435	12 TELEPHONE NUMBER 1815 741-6800		
13 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER: _____ (Specify) <input type="checkbox"/> G. UNKNOWN					
14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply) <input type="checkbox"/> A. RCRA 3001 DATE RECEIVED: ____/____/____ <input type="checkbox"/> B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ____/____/____ <input type="checkbox"/> C. NONE					

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE 2/28/91 <input type="checkbox"/> NO MONTH DAY YEAR		BY (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input checked="" type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): _____			
02 SITE STATUS (Check one) <input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION 1890 Present BEGINNING YEAR ENDING YEAR <input type="checkbox"/> UNKNOWN			

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED  
Petroleum wastes, Volatile Organic Compounds, Semi Volatile Organic Compounds, roofing materials, Chlorinated compounds.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Groundwater (contamination)

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)  
☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☒ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT Theresa Maene	02 OF (Agency/Organization) Flexible Products		03 TELEPHONE NUMBER 1815 881-7143	
04 PERSON RESPONSIBLE FOR ASSESSMENT Hank Kenzelmann	05 AGENCY IEPA-LPC	06 ORGANIZATION Pre Remedial Unit	07 TELEPHONE NUMBER 1217 782-6760	08 DATE 3/1/91 MONTH DAY YEAR



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
IL 043912222

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☒ A SOLID  
☐ B POWDER, FINES  
☒ C SLUDGE  
☐ D OTHER (Specify)  
☐ E SLURRY  
☒ F LIQUID  
☐ G GAS

02 WASTE QUANTITY AT SITE

(Measures of waste quantities must be independent)

TONS  
CUBIC YARDS Unknown  
NO OF DRUMS

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A TOXIC  
☐ B CORROSIVE  
☐ C RADIOACTIVE  
☒ D PERSISTENT  
☒ E SOLUBLE  
☐ F INFECTIOUS  
☐ G FLAMMABLE  
☐ H IGNITABLE  
I HIGHLY VOLATILE  
J EXPLOSIVE  
K REACTIVE  
L INCOMPATIBLE  
M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	Unknown		Petroleum wastes
OLW	OILY WASTE			
SOL	SOLVENTS	Unknown		Chlorinated solvents, VOC's
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	Unknown		Semi-volatiles (BNA's) PNA's
IOC	INORGANIC CHEMICALS	Unknown		
ACD	ACIDS			
BAS	BASES	Unknown		BNA's
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/ DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	1,2 Dichloroethane			110	ppm
	Benzene			200	ppm
	Naphthalene			1000	ppm
	Acenaphthene			15,000	ppm
	Anthracene			1400	ppm
	Benzo (ghi) perylene			1600	ppm
	Benzo (k) fluoranthene			1300	ppm
	Fluoranthene			3800	ppm
	Fluorene			2000	ppm
	Indeno (1,2,3-cd) pyrene			1200	ppm
	Phenanthrene			6100	ppm
	Pyrene			5900	ppm
	Benzo (a) anthracene			1800	ppm
	Benzo (a) pyrene			1700	ppm
	Benzo (b) fluoranthene			1700	ppm
	Chrysene			2000	ppm

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references e.g., state files, sample analysis reports)

Illinois Environmental Protection Agency - Land Pollution Control Files, Water Pollution Control Files  
Remcor, Inc. Workplans and Reports  
Info. from Personnel



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
IL 043912923

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION  
03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE \_\_\_\_\_)  
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

Groundwater samples collected from on-site monitoring wells have indicated contamination from VOCs, BNAs, and PNAs. It is unknown if a connection exists between the quarry and underlying aquifers.

01 ☐ B. SURFACE WATER CONTAMINATION  
03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE \_\_\_\_\_)  
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

Unknown

01 ☒ C. CONTAMINATION OF AIR  
03 POPULATION POTENTIALLY AFFECTED: 1280

02 ☐ OBSERVED (DATE \_\_\_\_\_)  
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

Numerous complaints about odors were reported.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS  
03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE \_\_\_\_\_)  
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ E. DIRECT CONTACT  
03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE \_\_\_\_\_)  
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

N/A

01 ☒ F. CONTAMINATION OF SOIL  
03 AREA POTENTIALLY AFFECTED: 6  
(Acres)

02 ☐ OBSERVED (DATE \_\_\_\_\_)  
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

Samples collected from borings have detected VOCs, BNAs, PNAs, and chlorinated solvents contamination.

01 ☐ G. DRINKING WATER CONTAMINATION  
03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE \_\_\_\_\_)  
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

Unknown

01 ☐ H. WORKER EXPOSURE/INJURY  
03 WORKERS POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE \_\_\_\_\_)  
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

N/A

01 ☐ I. POPULATION EXPOSURE/INJURY  
03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE \_\_\_\_\_)  
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

N/A



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
IL 243912922

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

Unknown

01 ☐ K. DAMAGE TO FAUNA  
04 NARRATIVE DESCRIPTION (Include name(s) of species)

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

Unknown

01 ☐ L. CONTAMINATION OF FOOD CHAIN  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

Unknown

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES  
(Spills, runoff, standing liquids, leaking drums)

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

N/A

01 ☐ N. DAMAGE TO OFFSITE PROPERTY  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

Illegal dumping occurred at this site in the 1960's & 1970's prior to initiation of the present operation.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

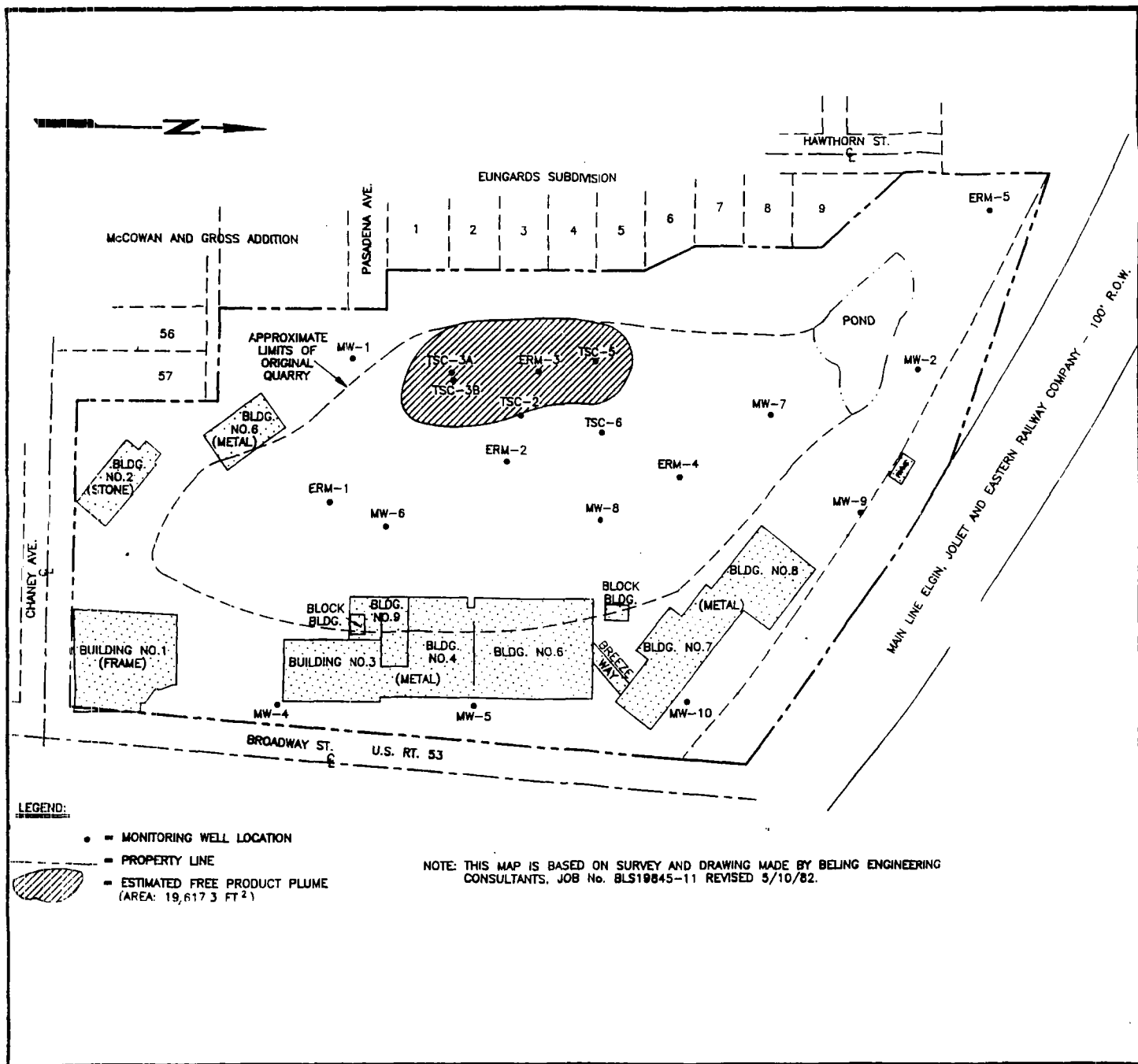
IEPA-LPC-Files  
Remediation Workplans and Reports  
ASCS Office

Interviews of facility personnel and resident (previous)

Insta Foam



SITE LOCATION



source: Remcor, Inc. 1990

## SITE MAP

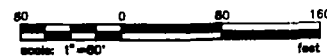


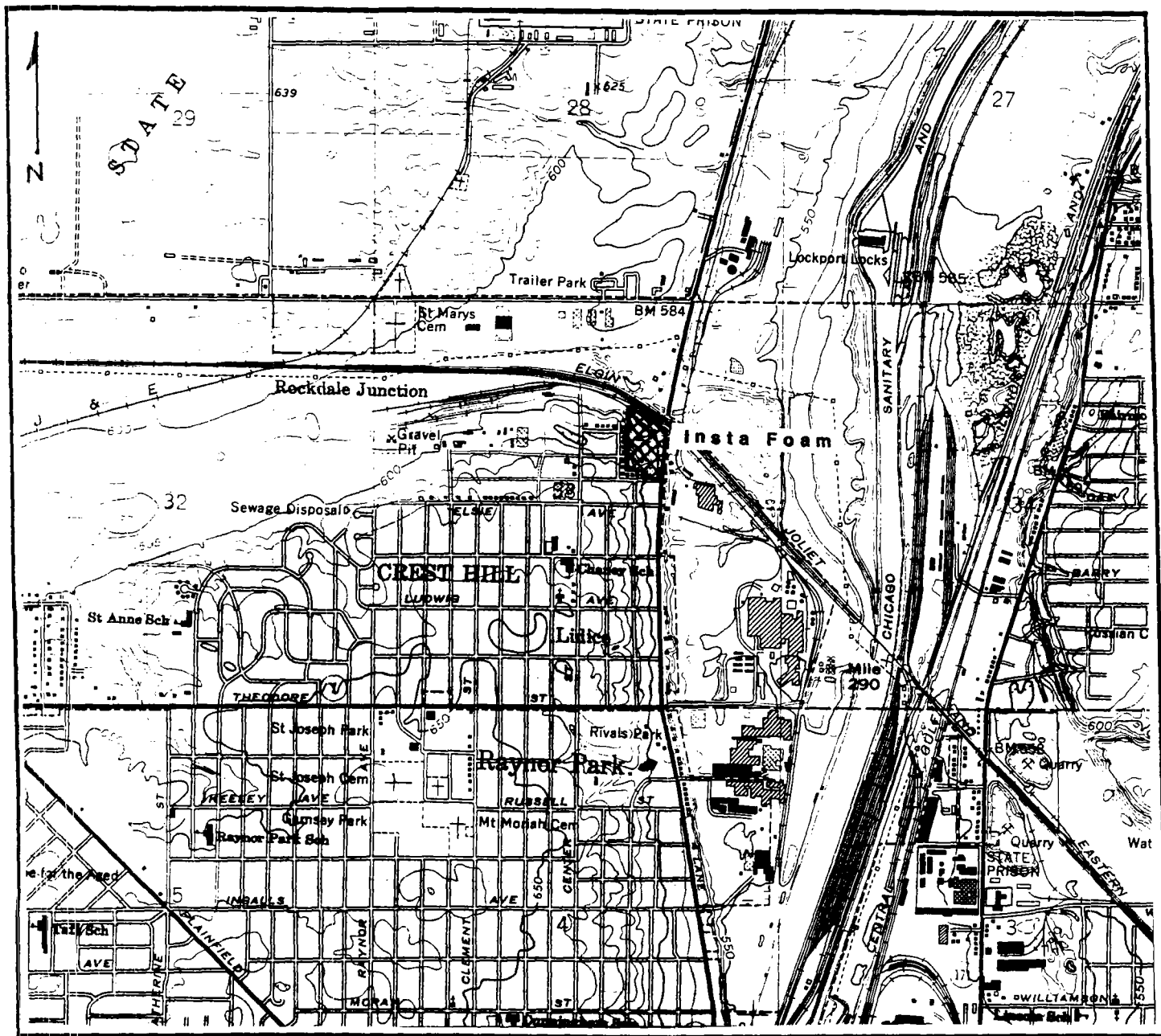
FIGURE 11

VOLUME ESTIMATION OF  
FREE PRODUCT  
CREST HILL, ILLINOIS  
PLANT FACILITY

PREPARED FOR  
FLEXIBLE PRODUCTS COMPANY

DRAWN	LBL 3/5/90	DRAWING NUMBER
CHECKED		89233-B16
APPROVED		

**REMCOR**



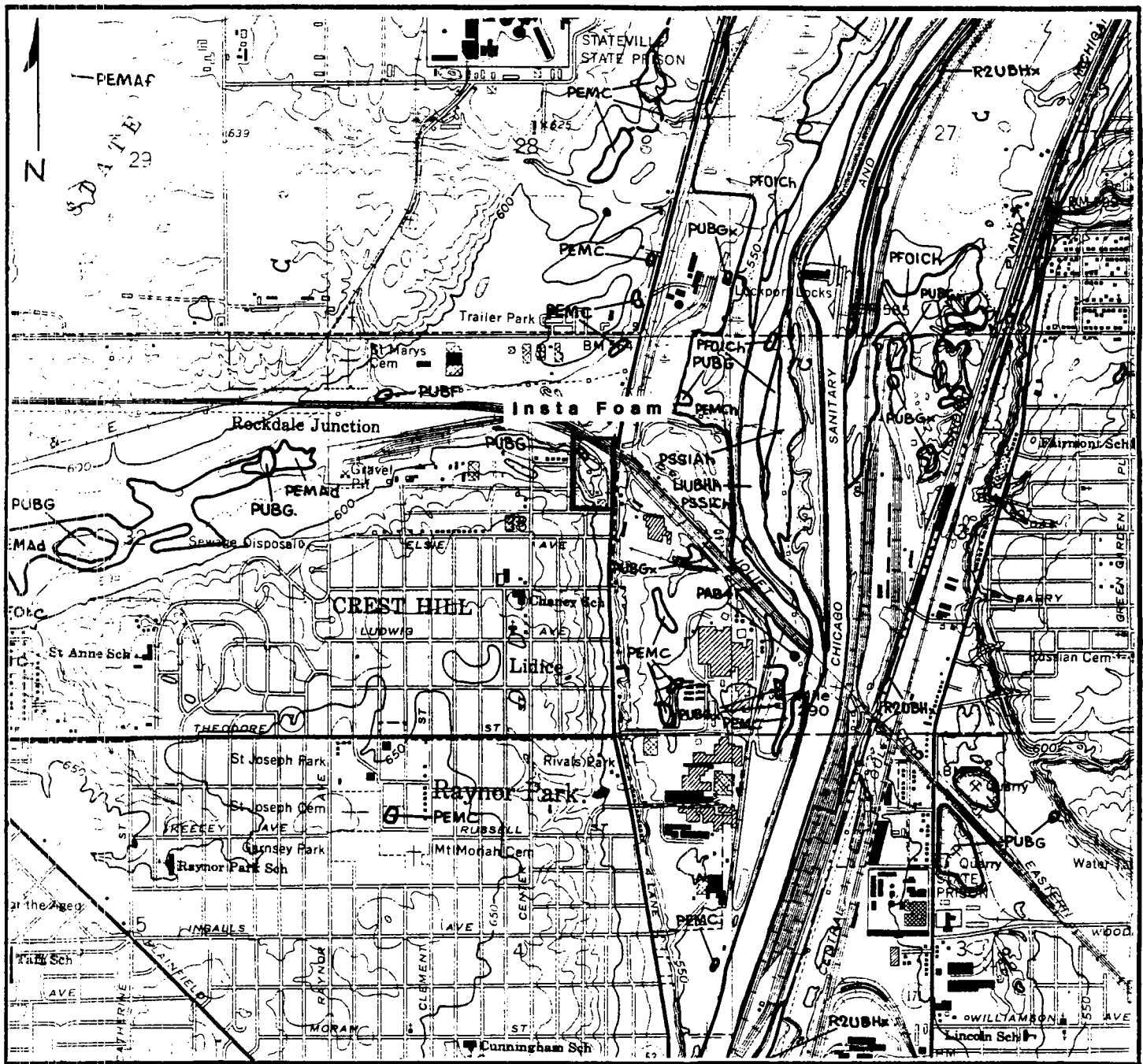
Source: IEPA 1990. Base Map: USGS 1973, Joliet, IL 7.5 minute quadrangle

# AREA MAP

SCALE 1:24 000



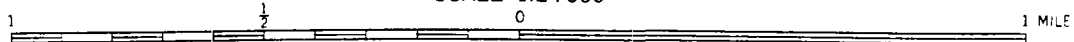




Source: USFWS Wetlands Inventory Map, 1983, Joliet, IL

# Wetlands Inventory Map

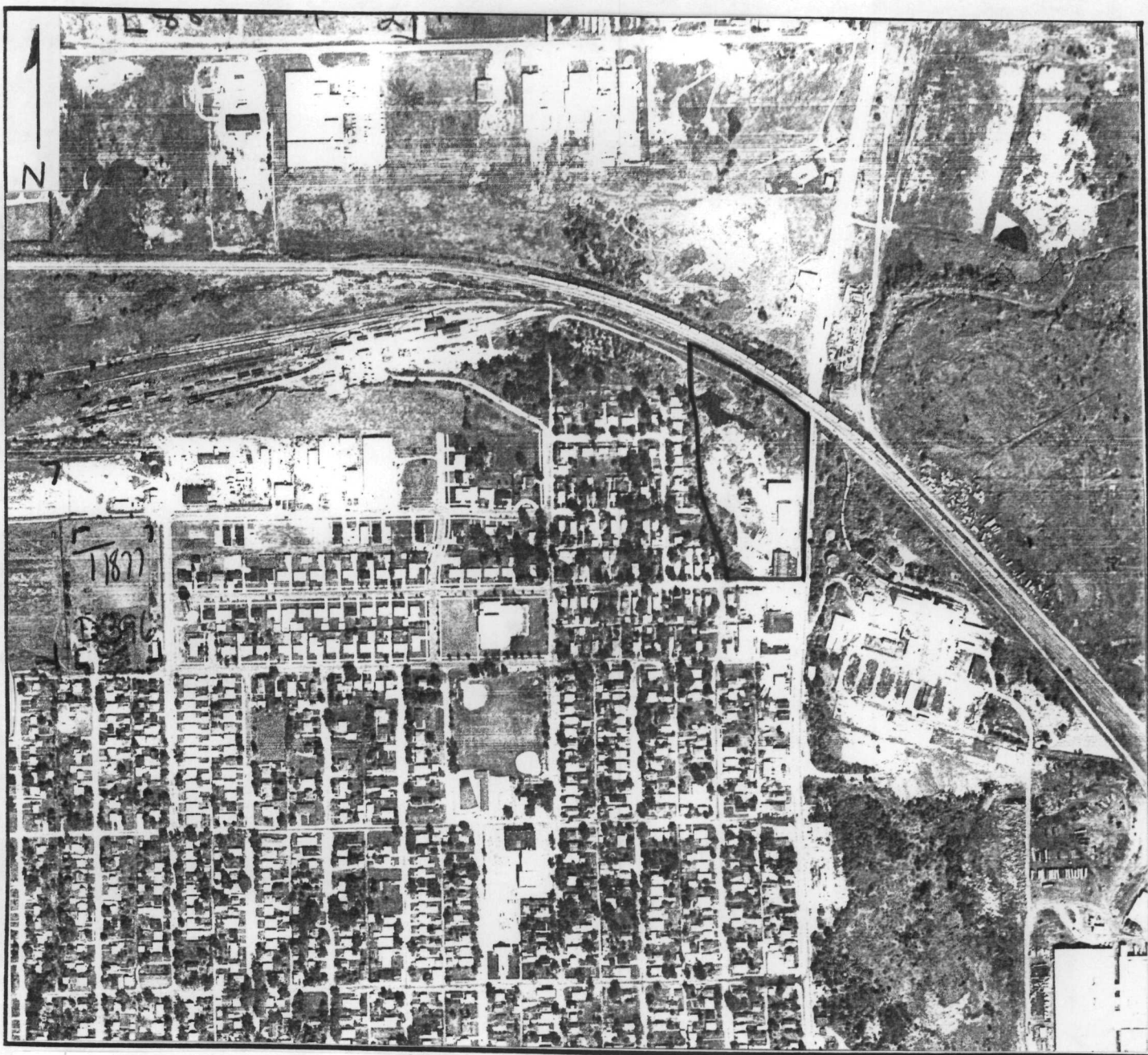
SCALE 1:24 000



## SYSTEM

## P - PALUSTRINE

CLASS	RB - ROCK BOTTOM	UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED	US - UNCONSOLIDATED SHORE	ML - MOSS-LICHEN	EM - EMERGENT	SS - SCRUB-SHRUB	FO - FORESTED	OW - OPEN WATER Unknown Bottom
1 Barren	1 Cobble-Gravel	1 Algal	1 Cobble-Gravel	1 Moss	1 Perennial	1 Broad-Leaved	1 Broad-Leaved	1 Broad-Leaved	
2 Rubble	2 Sand	2 Aquatic Moss	2 Sand	2 Lichen	2 Nonperennial	2 Deciduous	2 Deciduous	2 Deciduous	
	3 Mud	3 Floating Vascular	3 Mud			3 Needle-Leaved	3 Needle-Leaved	3 Needle-Leaved	
	4 Organic	4 Floating Vascular	4 Organic			4 Deciduous	4 Deciduous	4 Deciduous	
		5 Unknown Submerged	5 Vegetated			5 Evergreen	5 Evergreen	5 Evergreen	
		6 Unknown Surface				6 Deciduous	6 Deciduous	6 Deciduous	
						7 Evergreen	7 Evergreen	7 Evergreen	



Source: IEPA 1991 Base Map: ASCS 1971 Aerial Photograph

## 1971 AERIAL PHOTOGRAPH

Approximate Scale: 1 inch - 660 feet



Source: IEPA 1991 Base Map: ASCS 1987 Aerial Photograph

## 1987 AERIAL PHOTOGRAPH

Approximate Scale: 1 inch - 660 feet

# SDMS US EPA Region V

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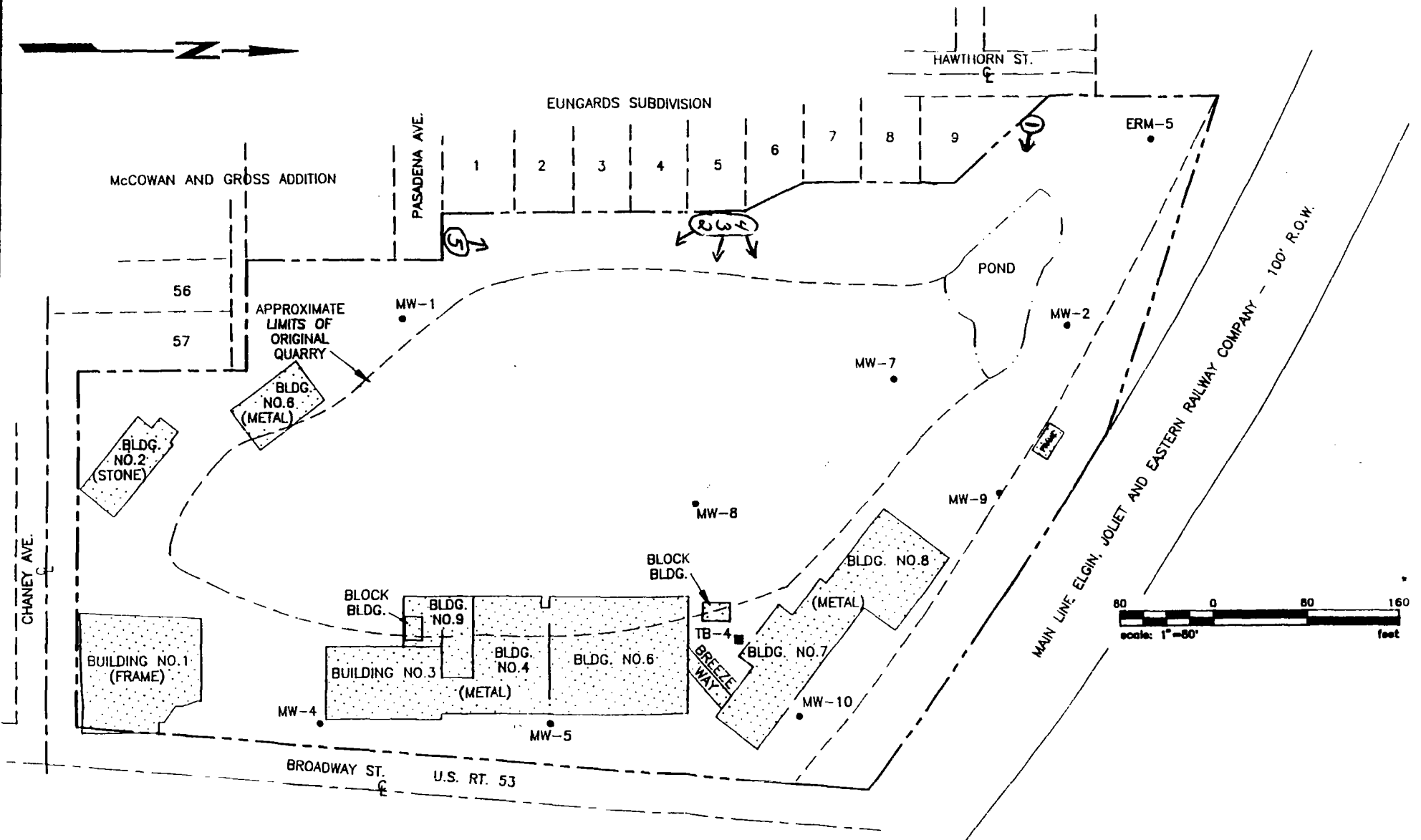
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SITE MAPS

Document is available at the EPA Region 5 Records Center.

**Specify Type of Document(s) / Comments:**





DATE: February 28, 1991

TIME: 10:30 AM

PHOTOGRAPH TAKEN BY:

Hank Konzelmann

PHOTO NUMBER: 1

LOCATION: \_\_\_\_\_

Insta Foam / Crest Hill

Will County

COMMENTS: PICTURE TAKEN TOWARD

East. On-site pond in



DATE: February 28, 1991

TIME: 10:40 AM

PHOTOGRAPH TAKEN BY:

Hank Konzelmann

PHOTO NUMBER: 2

LOCATION: \_\_\_\_\_

Insta Foam / Crest Hill

Will County

COMMENTS: PICTURE TAKEN TOWARD

Southeast. Main quarry area





DATE: February 28, 1991

TIME: 10:40 AM

PHOTOGRAPH TAKEN BY:

Hank Konzelmann

PHOTO NUMBER: 4

LOCATION: 043912922

Insta Foam / Crest Hill

Will County

COMMENTS: PICTURE TAKEN TOWARD

Northeast

DATE: February 28, 1991

TIME: 10:40 AM

PHOTOGRAPH TAKEN BY:

Hank Konzelmann

PHOTO NUMBER: 3

LOCATION: 043912922

Insta Foam / Crest Hill

Will County

COMMENTS: PICTURE TAKEN TOWARD

East





DATE: February 28, 1991

TIME: 10:50 AM

PHOTOGRAPH TAKEN BY:

Hank Konzelmanin

PHOTO NUMBER: 5

LOCATION: 043912922

Insta Foam / Crest Hill

Will County

COMMENTS: PICTURE TAKEN TOWARD

North



DATE: February 28, 1991

TIME: 11:05 AM

PHOTOGRAPH TAKEN BY:

Hank Konzelmanin

PHOTO NUMBER: 6

LOCATION: 043912922

Insta Foam / Crest Hill

Will County

COMMENTS: PICTURE TAKEN TOWARD

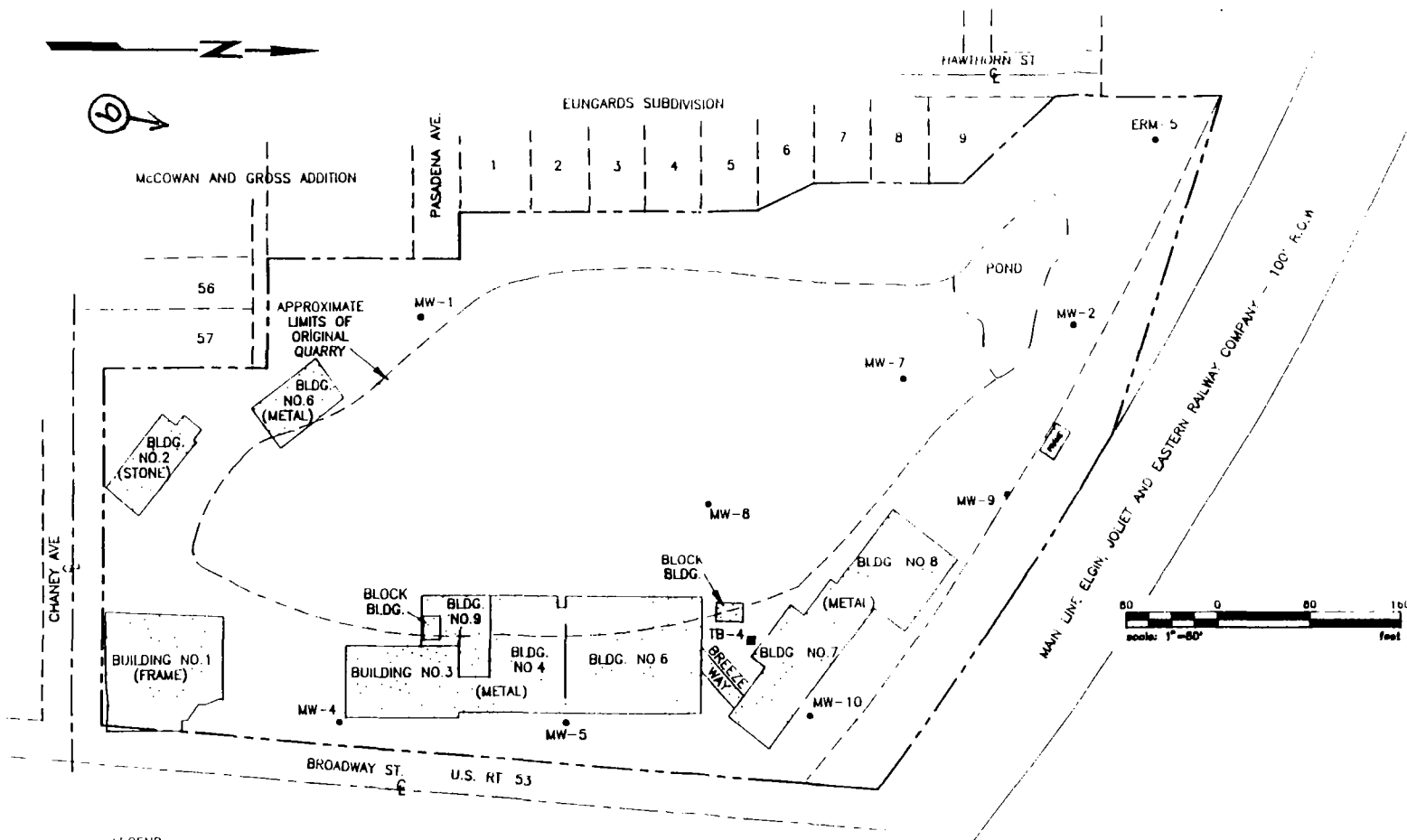
North, Creek and train

yard to the south of the

site.







LEGEND:

- = MONITORING WELL LOCATION
- = APPROXIMATE TEST BORING LOCATION
- = PROPERTY LINE

NOTE:

THIS MAP IS BASED ON SURVEY AND DRAWING MADE BY  
 BELING ENGINEERING CONSULTANTS, JOB No BLS19845-11 REVISED 5/10/82

DATE: February 1, 1991

TIME: 3:05 p

PHOTOGRAPH TAKEN BY:  
Hank Konzelmann

PHOTO NUMBER: 1

LOCATION: 1970455016

Crest Hill / Insta Foam →

Will County

COMMENTS: PICTURE TAKEN TOWARD  
Northeast



DATE: February 1, 1991

TIME: 3:07 pm

PHOTOGRAPH TAKEN BY:  
Hank Konzelmann

PHOTO NUMBER: 2

LOCATION: 1970455016

Crest Hill / Insta Foam →

Will County

COMMENTS: PICTURE TAKEN TOWARD  
South. Statesville Prison  
in foreground.





DATE: February 1, 1991

TIME: 3:08 p

PHOTOGRAPH TAKEN BY:

Hank Konzelmann

PHOTO NUMBER: 3

LOCATION: 1970455016

Crest Hill / Insta Foam →

Will County

COMMENTS: PICTURE TAKEN TOWARD

Southwest



DATE: February 1, 1991

TIME: 3:09 p

PHOTOGRAPH TAKEN BY:

Hank Konzelmann

PHOTO NUMBER: 4

LOCATION: 1970455016

Crest Hill / Insta Foam →

Will County

COMMENTS: PICTURE TAKEN TOWARD

Southwest





DATE: February 1, 1991

TIME: 3:09 p

PHOTOGRAPH TAKEN BY:

Hank Konzelmann

PHOTO NUMBER: 5

LOCATION: 1970455016

Crest Hill / Insta Foam →

Will County

COMMENTS: PICTURE TAKEN TOWARD

Southwest



DATE: February 1, 1991

TIME: 3:10 p

PHOTOGRAPH TAKEN BY:

Hank Konzelmann

PHOTO NUMBER: 6

LOCATION: 1970455016

Crest Hill / Insta Foam →

Will County

COMMENTS: PICTURE TAKEN TOWARD

Northwest





DATE: February 1, 1991

TIME: 3:11p

PHOTOGRAPH TAKEN BY:

Hank Konzelmann

PHOTO NUMBER: 7

LOCATION: 1970455016

Crest Hill / Insta Foam →

Will County

COMMENTS: PICTURE TAKEN TOWARD

North



DATE: February 1, 1991

TIME: 3:11p

PHOTOGRAPH TAKEN BY:

Hank Konzelmann

PHOTO NUMBER: 8

LOCATION: 1970455016

Crest Hill / Insta Foam →

Will County

COMMENTS: PICTURE TAKEN TOWARD

North.





DATE: February 1, 1991

TIME: 3:12p

PHOTOGRAPH TAKEN BY:

Hank Konzelmann

PHOTO NUMBER: 9

LOCATION: 1970455016

Crest Hill / Insta Foam

Will County

COMMENTS: PICTURE TAKEN TOWARD

North.



DATE: February 1, 1991

TIME: 3:13p

PHOTOGRAPH TAKEN BY:

Hank Konzelmann

PHOTO NUMBER: 10

LOCATION: 1970455016

Crest Hill / Insta Foam →

Will County

COMMENTS: PICTURE TAKEN TOWARD

Southwest





DATE: February 1, 1991

TIME: 3:14 p.

PHOTOGRAPH TAKEN BY:

Hank Konzelmann

PHOTO NUMBER: 11

LOCATION: 1970455016

Crest Hill / Insta Foam

Will County →

COMMENTS: PICTURE TAKEN TOWARD

Southwest



DATE: February 1, 1991

TIME: \_\_\_\_\_

PHOTOGRAPH TAKEN BY:

PHOTO NUMBER: \_\_\_\_\_

LOCATION: 1970455016

Crest Hill / Insta Foam

Will County

COMMENTS: PICTURE TAKEN TOWARD

No  
Picture

## REFERENCES

- Reference 1. August 11, 1988 letter from NET Environmental containing a summary of analytical results from samples collected on the Insta Foam site. Also included is a map depicting the locations of the sampling points.
- Reference 2. August 31, 1988 Environmental Investigation Report prepared by ERM including selected laboratory data sheets.
- Reference 3. August 4, 1989 letter to the IEPA from Laura Leonard of Sidley and Austin containing a copy of a Sea Group Report outlining the historical dumping activities at the Insta Foam site.
- Reference 4. April, 1990 Final Site Investigation Report narrative submitted to Insta Foam by Remcor.
- Reference 5. Selected analytical results on laboratory data sheets.





NATIONAL  
ENVIRONMENTAL  
TESTING, INC.

NET Midwest, Inc.  
Bartlett Division  
850 West Bartlett Road  
Bartlett, IL 60103  
Tel: (312) 289-3100  
Fax: 312-289-4180

Formerly: Aqualab, Inc.

## Reference 1

11 August 1988

Mr. Mike Roche  
ERM-NORTH CENTRAL, INC.  
102 Wilmot Road, Suite 300  
Deerfield IL 60015

Dear Mr. Roche:

Enclosed is the preliminary report for samples received from the Project. Analyses include heavy metals, cyanide, volatile organics, semi-volatile organics, and PCB's. This report includes data on samples received by NET MIDWEST on July 11, 13, 15, 18, and 19, 1988. The methods used for these analyses are found in the USEPA Publication: "Test Methods for Evaluating Solid Waste," SW-846, 2nd Edition, Revised April 1984.

Volatile organic analyses (VOA) were performed using EPA Methods 8240 and 5030. Aliquots of the samples are placed in a sparging device. Internal standards and deuterium labelled surrogates are added to verify the analytical results and provide qualitative and quantitative references for every sample. The samples are then purged with helium and the volatile organics are transferred to the gas stream. The organics are removed from the gas stream with a Tenax/Silica Gel trap. When purging is complete, the trap is rapidly heated and the trapped organics transferred to the analytical chromatographic column of a gas chromatograph/mass spectrometer (GC/MS). As the individual components elute, complete mass spectra are collected and stored by a computer system. The data are then processed by custom computer programs and also evaluated manually to detect and quantify priority pollutants. Identifications are verified by comparison of the sample component mass spectrum and retention time to that of the standard component.

Base/Neutral and Acid compounds were analyzed using EPA Methods 8270 and 3540. Aliquots of the samples are extracted first at basic and then at acidic pH's with methylene chloride. The extracts are concentrated and analyzed by GC/MS using the same approach as the volatile organics.

**NET****NATIONAL  
ENVIRONMENTAL  
TESTING, INC.**NET Midwest, Inc.  
Bartlett Division  
850 West Bartlett Road  
Bartlett, IL 60103  
Tel: (312) 289-3100  
Fax: 312-289-4180

Formerly: Aqualab, Inc.

Mr. Mike Roche  
11 August 1988  
Page Two

PCB's were analyzed using EPA Methods 8080 and 3540. Aliquots of the samples are extracted with methylene chloride at a neutral pH. The extracts are then concentrated and analyzed using an electron capture/gas chromatograph. Identification of components is based on the retention times of the unknown compared to those of standards. All positive identifications were confirmed using a second analytical GC column.


Inorganic parameters were performed using Methods outlined in "Test Methods for Evaluating Solid Waste", USEPA SW-846.

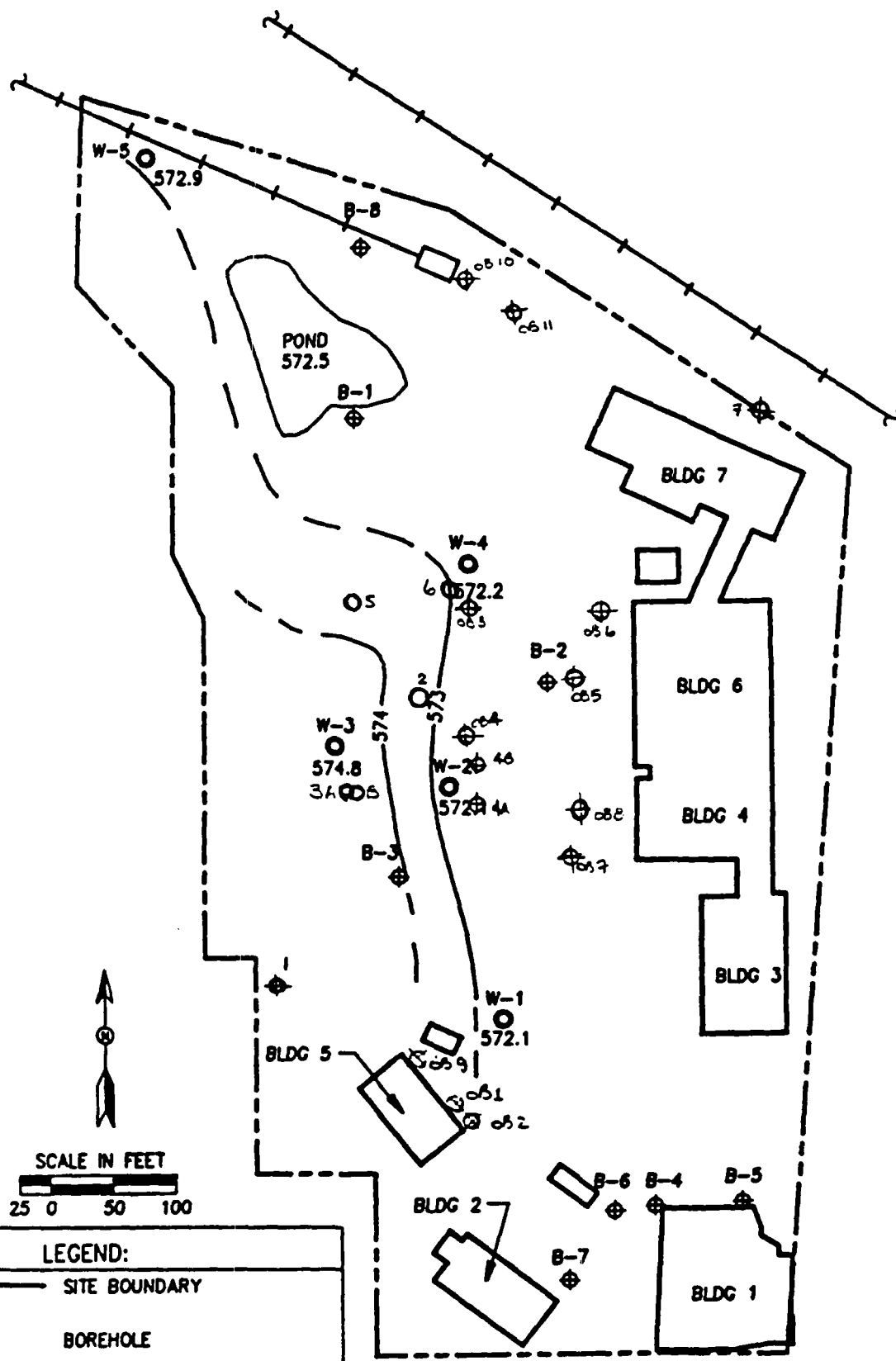
Due to instrument failure, the GC analysis for total hydrocarbons has been delayed. Upon completion of these analyses, a final report will be submitted.

If after reviewing these results you have any questions, please feel free to call. NET MIDWEST has been pleased to provide these analytical services for you.

Sincerely,

NET MIDWEST, INC.

  
William H. Mottashed  
Division ManagerWHM/dab  
Encls.



**LEGEND:**

- SITE BOUNDARY
- B-7 BOREHOLE
- W-1 WELL
- 572.1 WATER LEVEL ELEVATION OF 7/22/88 (FT.-AMSL)
- 573 --- CONTOUR OF EQUAL WATER LEVEL ELEVATION (DASHED WHERE APPROXIMATE)

DRAWINGS ARE APPROXIMATE

INSTA-FOAM PRODUCTS, INC.  
CREST HILL, IL  
WATER LEVEL ELEVATION DATA

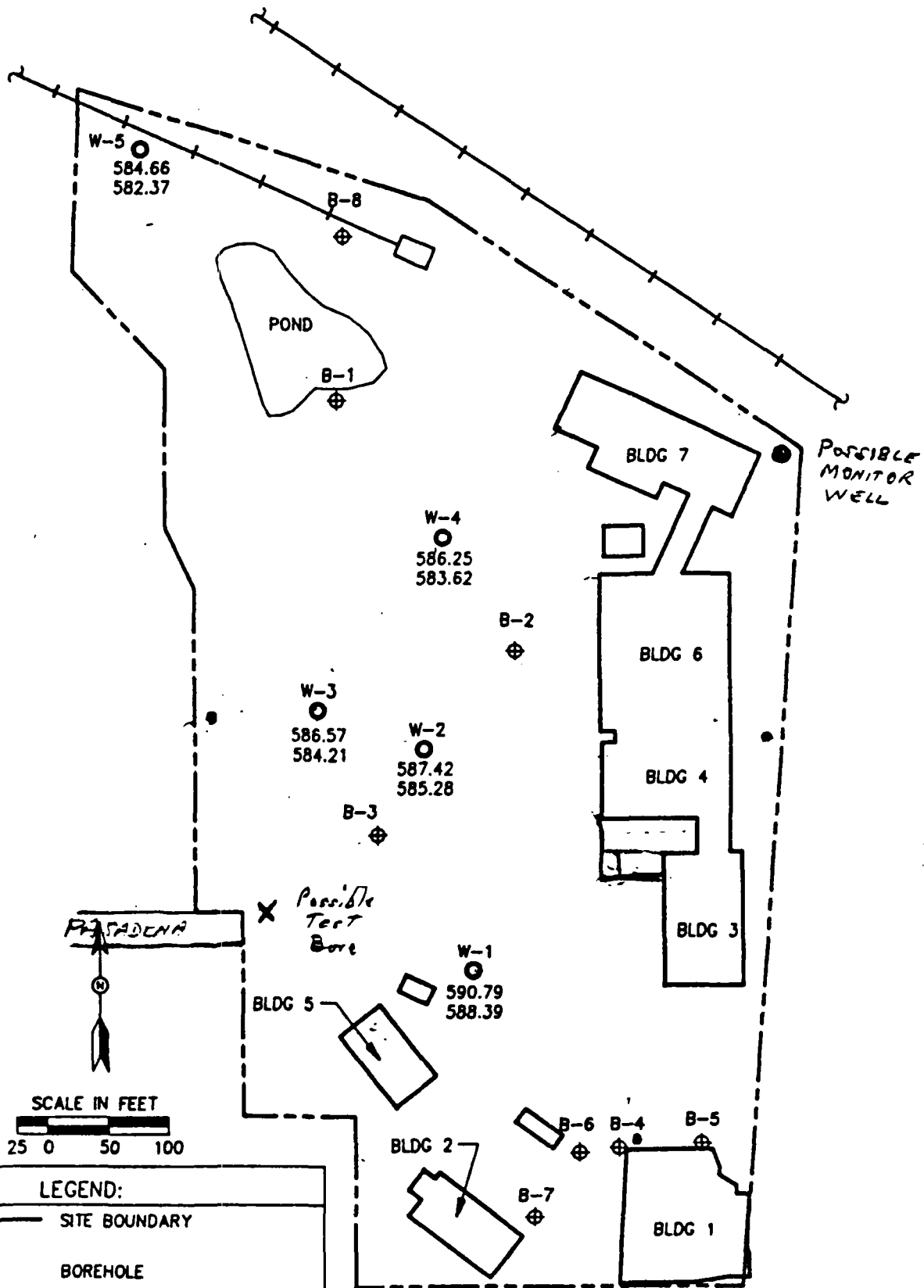
ERM North Central, Inc.

FIGURE

3

9/1/88

CS



INSTA-FOAM PRODUCTS, INC.  
CREST HILL, IL  
WELL AND BORING LOCATIONS

FIGURE  
2

ERM-North Central, Inc.

9/1/88  
CD

TABLE 1  
INSTA-FOAM PRODUCTS, INC.  
CREST HILL, ILLINOIS  
SUMMARY OF ORGANIC COMPOUNDS DETECTED IN QUARRY AREA FILL

SAMPLE LOCATION

PARAMETER (ug/g)	W-1(B)	W-1(E)	W-2(D)	W-2(E)	W-3(B)	W-3(C)	W-4(A)	W-4(F)	W-5(A)	B-1(C)	B-1(D)	B-2(B)	B-2(E)	B-3(C)	B-3(D)
<b>Volatile Organic Compounds (VOCs)</b>															
Ethyl Benzene	<1	NA	<1	NA	<1	NA	<1	NA	<1	<1	NA	<1	NA	1.0	NA
Xylene, m & p	<1	NA	<1	NA	<1	NA	<1	NA	<1	<1	NA	<1	NA	3.1	NA
Xylene, o	<1	NA	<1	NA	<1	NA	<1	NA	<1	<1	NA	<1	NA	1.6	NA
<b>Semivolatile Compounds</b>															
Naphthalene	<1	<1	<5	<1	<5	18.9	<10	<10	<5	<10	<1	<10	<10	<10	77
Acenaphthene	<1	<1	<5	<1	<5	<5	<10	23	<5	<10	<1	<10	12	<10	22
Fluorene	<1	<1	<5	<1	<5	<5	<10	16	<5	<10	<1	<10	<10	<10	40
Dibenzofuran	<1	<1	<5	<1	<5	<5	<10	12	<5	<10	<1	<10	<10	<10	15
Phenanthrene	2.8	<1	5.9	<1	<5	26	<10	57	<5	<10	<1	<10	25	18	156
Anthracene	<1	<1	<5	<1	<5	<5	<10	16	<5	<10	<1	<10	<10	<10	11
Fluoranthene	3.6	<1	5	<1	<5	<5	<10	40	<5	<10	<1	<10	17	<10	<1
Pyrene	2.8	<1	<5	<1	<5	7	<10	32	<5	<10	<1	<10	15	<10	38
Benz(a)anthracene	1.3	<1	<5	<1	<5	<5	<10	16	<5	<10	<1	<10	<10	<10	29
Chrysene	1.4	<1	<5	<1	<5	9	<10	16	<5	<10	<1	<10	<10	<10	45
Benzo(b)fluoranthene	<1	<1	<5	<1	<5	<5	<10	17	<5	<10	<1	<10	<10	<10	21
Benzo(k)fluoranthene	<1	<1	<5	<1	<5	<5	<10	15	<5	<10	<1	<10	<10	<10	<1
Benzo(a)pyrene	<1	<1	<5	<1	<5	<5	<10	13	<5	<10	<1	<10	<10	<10	11
<b>Other Information</b>															
Fats, Oil and Grease (%)	0.11	0.01	0.5	0.01	0.11	1.28	0.10	12.83	0.03	0.40	0.08	0.08	2.0	1.02	3.37
Field HNU Reading	0.4	0	22	2.4	54	71	11	17	0	0.3	35	2.4	5.0	40	45
Depth Interval (ft.)	2.5-5	15-20	15-17.5	17.5-20	2.5-7.5	10-12.5	0-2.5	15-17.5	0-1.8	0-2.5	12.5-17.5	5-7.5	15-20	7.5-12.5	12.5-17.

TABLE 2  
INSTA-FOAM PRODUCTS, INC.  
CREST HILL, ILLINOIS  
SUMMARY OF ORGANIC COMPOUNDS DETECTED IN GROUND WATER

SAMPLE LOCATION

PARAMETER (mg/l)	W-1		W-2		W-3		W-4		W-5	
	Round 1	Round 2	Round 1	Round 2	Round 1	Round 2	Round 1	Round 2	Round 1	Round 2
<b>Volatile Organic Compounds (VOCs)</b>										
1,1-Dichloroethene	<1	<1	<1	<1	<50	<100	2.8	2.0	<1	<1
Acetone	<10	<10	<10	<10	<500	<1000	25	<10	<10	<10
1,1-Dichloroethane	<1	<1	5.8	11	310	370	<1	<1	<1	<1
2-Butanone	<10	<10	<10	<10	<500	<1000	11	<10	<10	<10
1,1,1-Trichloroethane	<1	<1	2.2	2.4	220	250	<1	<1	1.4	<1
Benzene	<1	<1	<1	1.1	<50	<100	4.2	2.5	<1	<1
Trichloroethene	<1	2.1	<1	<1	<50	<100	<1	<1	<1	<1
Toluene	<1	<1	<1	<1	105	190	2.8	1.4	<1	<1
Xylene, m & p	<1	<1	<1	<1	366	465	1.1	1.0	<1	<1
Xylene, o	<1	<1	<1	<1	219	256	1.4	1.2	<1	<1
<b>Semivolatile Compounds</b>										
Naphthalene	<10	<10	<10	<10	1540	1880	<10	<10	<10	<10
Acenaphthene	<10	<10	<10	<10	<400	<5000	<10	10	<10	<10
Fluorene	<10	<10	<10	<10	450	580	<10	<10	<10	<10
Phenanthrene	<10	<10	<10	<10	1700	2240	<10	31	<10	<10
di-n-butyl-phthalate	<10	<10	<10	<10	<400	<5000	<10	11	<10	<10
Fluoranthene	<10	<10	<10	<10	<400	<5000	<10	14	<10	<10
Pyrene	<10	<10	<10	<10	430	730	<10	17	<10	<10
Benz(a)anthracene	<10	<10	<10	<10	380	640	<10	13	<10	<10
Chrysene	<10	<10	<10	<10	560	940	<10	19	<10	<10
2-methyl-4,6-Dinitrophenol	<50	<50	<50	<50	<2000	2020	<50	<50	<50	<50
PCB-1254	<10	<1	<1	<1	1.7	1.5	<1	<1	<1	<1
<b>Fats, Oils &amp; Grease (mg/l)</b>										
	<1	<1	155	36	1570	6300	120	7	8	3

TABLE 3  
INSTA-FOAM PRODUCTS, INC.  
CREST HILL, ILLINOIS  
SUMMARY OF INORGANIC COMPOUNDS IN GROUND WATER

PARAMETER (mg/l)	SAMPLE LOCATION									
	W-1		W-2		W-3		W-4		W-5	
	Round 1	Round 2	Round 1	Round 2	Round 1	Round 2	Round 1	Round 2	Round 1	Round 2
Cyanide, Total	0.011	0.003	0.004	0.002	0.003	0.003	0.002	0.004	0.003	0.002
Antimony	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Arsenic	0.002	<0.001	0.001	<0.001	0.003	0.003	0.002	0.002	<0.001	<0.001
Barium	0.15	0.12	0.10	0.10	0.04	0.06	0.11	0.08	0.05	0.05
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cadmium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Chromium, Total	0.023	<0.001	0.009	0.008	0.005	0.009	0.013	0.012	<0.001	0.002
Lead	0.05	0.02	0.02	0.17	0.09	<0.01	0.02	<0.01	<0.01	<0.01
Mercury	0.0005	<0.0001	0.0003	<0.0001	0.0002	0.0003	0.0002	<0.0001	0.0001	0.0001
Nickel	0.02	0.03	0.04	0.07	0.04	0.04	0.02	0.03	0.03	0.01
Selenium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Silver	0.002	0.003	0.005	0.005	0.005	0.006	0.005	0.004	<0.001	0.005

TABLE 4  
INSTA-FOAM PRODUCTS, INC.  
CREST HILL, ILLINOIS

SUMMARY OF MDI, TDI AND RELATED COMPOUNDS IN GROUND WATER

Parameter (ug/l)	SAMPLE LOCATION				
	W-1	W-2	W-3	W-4	W-5
Toluene-2,4-diisocyanate (2,4-TDI)	<100	<100	<100	<100	<100
Toluene-2,6-diisocyanate (2,6-TDI)	<100	<100	<100	<100	<100
Toluene-2,4-diamine (2,4-TDA)	<4	<20	3000	64	<4
Toluene-2,6-diamine (2,6-TDA)	<4	22	14400	560	<4
Methyl Bisphenyl-4,4'-diamine (4,4'-MDA)	<4	<20	<20	400	<4

Notes:

1. MDI analyses unavailable at time of report preparation.
2. 2,4-TDI and 2,6-TDI have detection limits of 100 ug/l.
3. 2,4-TDA, 2,6-TDA, and 4,4'-MDA have detection limits of 4 ug/l and quantification limits of 20 ug/l. Where the quantification limit is noted, the sample may contain the compound, however, at levels which are too low to quantify.



**APPENDIX C.1**

**QUARRY AREA FILL ANALYTICAL DATA**

## **Reference 2**

**ENVIRONMENTAL INVESTIGATION  
AT  
INSTA-FOAM PRODUCTS, INC.  
CREST HILL, ILLINOIS**

**AUGUST 31, 1988**

**PREPARED FOR:**

**PREPARED BY:  
ENVIRONMENTAL RESOURCES MANAGEMENT-NORTH CENTRAL, INC.  
102 WILMOT ROAD, SUITE 300  
DEERFIELD, ILLINOIS 60015**

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### APPENDIX NO.

### TITLE

A	Monitor Well and Fill Boring Drilling Logs
B	Monitor Well Construction Summaries
C	Results of Fill, Ground Water and Pond/Sediment Chemical Analysis
C.1	Quarry Area Fill Analytical Data
C.2	Quarry Area Ground Water Analytical Data
C.3	Pond/Sediment Analytical Data
C.4	Building No. 1 Fill Analytical Data

ENVIRONMENTAL INVESTIGATION  
AT  
INSTA-FOAM PRODUCTS, INC.  
CREST HILL, ILLINOIS

1.0 INTRODUCTION

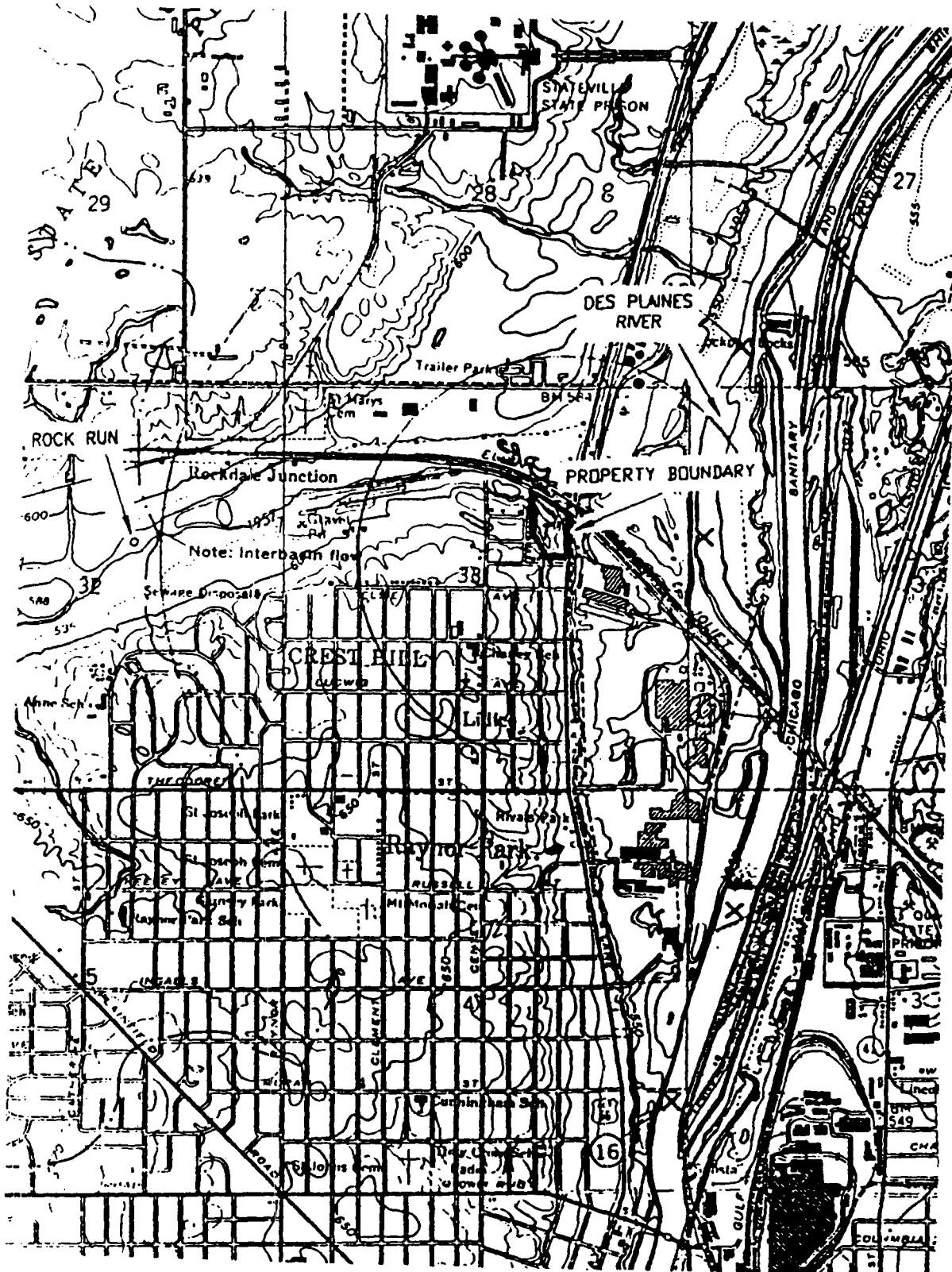
1.1 Site Location and Manufacturing Operations

Insta-Foam Products, Inc. is located in the City of Crest Hill, Illinois at the northwest corner of U.S. Route 53 (Broadway) and Chaney Street (Figure 1). The facility is located in the southwest quarter of the northeast quarter of Section 33, T.36 N, R. 10 E. The Rock Run drainage flows in an easterly direction just north of the Insta-Foam facility property boundary towards the Des Plaines River which is located approximately 1,600 feet to the east.

Insta-Foam Products, Inc. currently manufactures urethane foam at the Crest Hill facility for use as an insulating material. Previously, the site was used for other industrial purposes.

1.2 History

The industrial history of the site dates back over 100 years and includes the operation of a stone quarry (dolomite rock). Aerial photographs indicate that the quarry operation extended west of the property boundary along the Rock Run drainage. Based on conversations with the current owners, the quarry began to be filled with a variety of industrial waste and debris in the early



Source: U.S. Geological Survey Hydrologic  
Investigations Atlas HA-89  
Scale: 1" = 2000'

INSTA-FOAM PRODUCTS, INC.  
CREST HILL, IL  
LOCATION MAP

ERM ERM-North Central, Inc.

FIGURE

1

8/31/88

CS



1940's. Although the nature of the waste materials deposited in the quarry is undocumented, waste materials deposited in the quarry may have included: refractory brick, slag from a steel mill operation, and debris from fires at both the nearby GAF plant and the Insta-Foam facility. In addition, the site is thought to have been used as a lumber yard and as a terminal or storage area for a petroleum tanker operator.

Representatives of Environmental Resources Management-North Central, Inc. (ERM-North Central), , and Insta-Foam Products, Inc. (a subsidiary of Flexible Products Co.) met at the facility on June 21, 1988 to discuss the scope of an environmental investigation for potential real estate transfer of the property from Insta-Foam Products, Inc. to the

Based on those discussions and site reconnaissance, several potential sources of environmental contamination were noted. These included: (1) the former quarry area, which includes a pond/open dump area in the northwest portion of the site, (2) the fill material upon which Building No. 1 was constructed, and (3) areas where methylene bisphenyl isocyanate (MDI) has spilled on the land surface. Toluene-2,4-diisocyanate (TDI) is also reported to have been used previously at the property as part of the urethane foam manufacturing process. In addition, it was plausible that ground water contaminants could be originating upgradient of the Insta-Foam facility and migrating to the property from other industrial locations. Subsequently, an environmental investigation was undertaken to assess the nature and extent of potential environmental contamination associated with these sources. The purpose of this report is to document field methods for data acquisition and the results of all soil, ground water and surface water/sediment analyses.

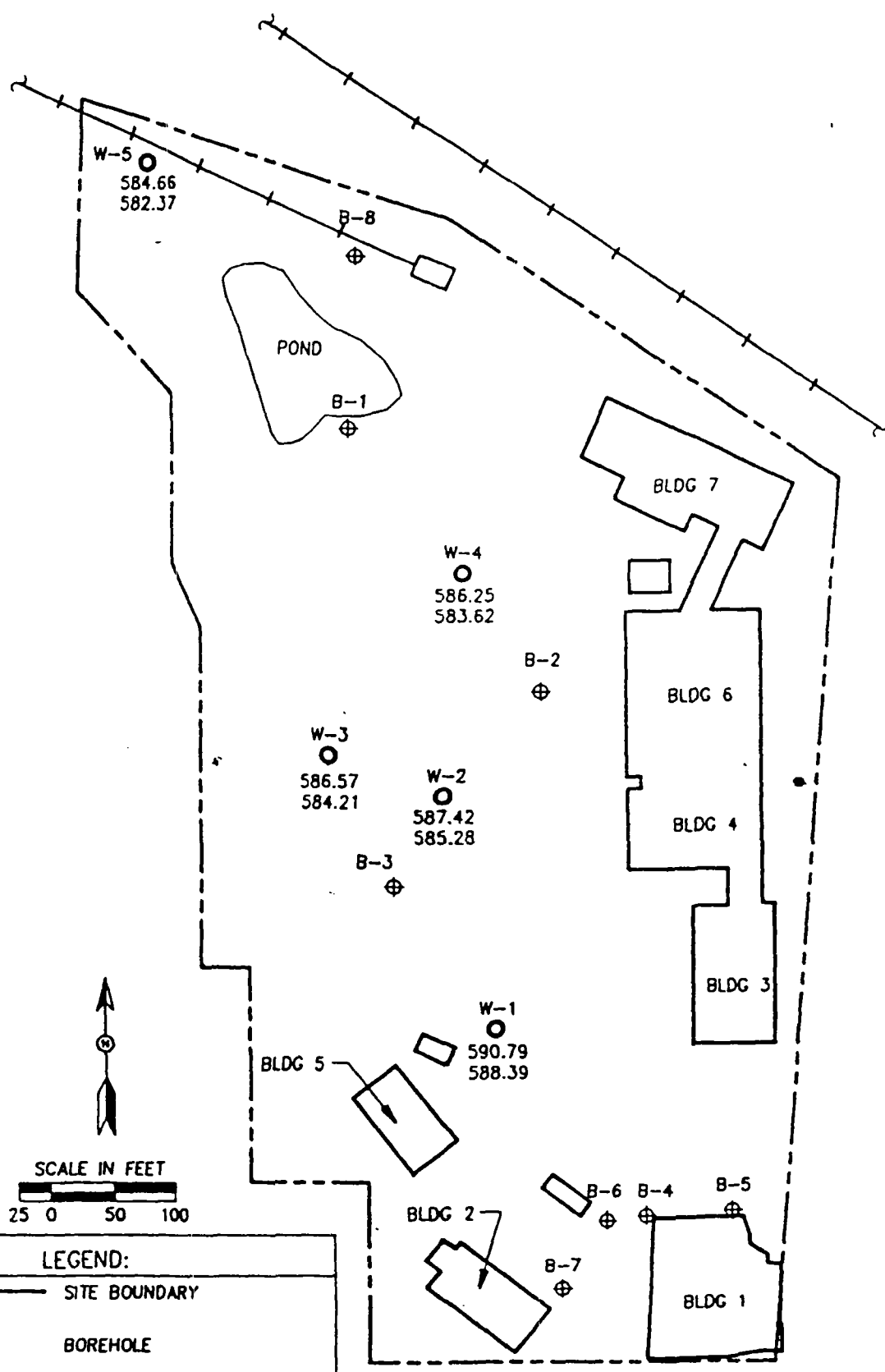
## 2.0 RESULTS OF ENVIRONMENTAL INVESTIGATION

### 2.1 Quarry Area

#### 2.1.1 Fill Sampling and Analysis

Aerial photographs dating back to 1961 were reviewed in order to define quarry area limits for use in locating soil borings. A total of seven (7) borings were drilled into and through the quarry fill materials to chemically characterize them (Figure 2). These borings were drilled with a hollow-stem auger and sampled with a 2-inch diameter split spoon sampler, driven ahead of the hollow-stem auger. Composite fill samples from above the water table were logged and removed from the sampler in 2.5-foot intervals and placed in both headspace and sampling jars. An HNu photoionization meter was used to screen the samples from above the water table for the presence of volatile organic contamination using the "headspace" procedure. One sample from above the water table from each boring was selected for analysis on the basis of the organic vapor detection level and/or visual observation of selected waste materials. Composite fill samples from below the water table were also logged and removed from the sampler in 2.5-foot intervals and placed in sampling jars. One sample from below the water table from each boring was selected for analysis on the basis of the organic vapor detection level, odor, and/or the visual observation of selected waste materials. In many instances, insufficient fill material was recovered from the 2.5-foot sampling interval, such that a larger sampling interval had to be composited for analysis.

Appendix A contains drilling logs for borings advanced within the quarry area. Four (4) of these borings, designated W-1 through



**LEGEND:**

--- SITE BOUNDARY

B-7  
⊕ BOREHOLE

W-1  
○ WELL

580.79 ← MEASURING POINT (TOP OF CASING) ELEVATION (FT.-AMSL)

588.39 ← GROUND ELEVATION (FT.-AMSL)

DRAWINGS ARE APPROXIMATE

INSTA-FOAM PRODUCTS, INC.  
CREST HILL, IL  
WELL AND BORING LOCATIONS

**ERM** ERM-North Central, Inc.

FIGURE  
2

9/1/88  
CS

W-4, were subsequently completed as monitoring wells. An additional monitoring well, W-5, was completed outside of the quarry fill in dolomite bedrock (Figure 1) in the assumed upgradient direction to monitor potential contamination migration onsite. The remaining three (3) quarry fill borings designated B-1 through B-3 were not completed as monitoring wells and were filled with drill cuttings following completion of logging and sampling.

Quarry area fill samples from above the water table were analyzed for the volatile, semivolatile, and inorganic parameters on the Target Compound List (TCL) as listed in the July, 1987 Statement of Work (SOW) for the USEPA Contract Laboratory Program (CLP). In addition, the percentage of fats, oil and grease in the fill material was determined along with a scan for hydrocarbon compounds. Fill samples from below the water table were analyzed similarly with the exception that volatile organic compounds were not determined on the samples. Table 1 presents a summary of the organic compounds detected in the quarry area fill while Appendix C.1 contains the complete analytical results.

Volatile organic compounds (VOCs) were detected in only one quarry fill (B-3C) sample above the water table. The drilling log for this fill boring (Appendix A) indicates that a portion of the sampling interval may have included fill saturated with water and oil. This may be the source of the VOCs detected in this sample. Several semivolatile compounds were detected within the quarry area fill material. Semivolatile compounds were detected in every quarry area fill boring with the exception of Boring B-1. Phenanthrene was detected most frequently and in highest concentration. Other frequently detected compounds included pyrene, chrysene, and fluoranthene. In general, fill samples

with the greatest percentage of fats, oil and grease also were those in which the semivolatile organic compounds were measured above the detection limits.

#### 2.1.2 Ground Water Sampling and Analysis

As previously noted, four (4) of the fill borings were completed as monitoring wells and additionally, a bedrock monitoring well was installed as shown on Figure 1. The purpose of these wells was to secure ground water samples for chemical analysis and also to estimate ground water flow direction. These wells were constructed with Schedule 40, 2-inch flush joint, threaded PVC pipe using standard construction and development procedures. They were installed under the supervision of a well driller licensed in the State of Illinois. Appendix B contains the construction summary for each of the five monitoring wells.

Following development, two rounds of ground water samples were collected from each monitoring well using dedicated bailers and analyzed for the volatile, semivolatile, inorganic and PCB compounds on the TCL. In addition, fats, oil and grease were determined on each ground water sample and samples were secured for analysis of MDI, TDI and related compounds by a laboratory. Appendix C.2 contains the complete ground water analytical results.

Tables 2 and 3 present a summary of organic TCL compounds and inorganic TCL compounds detected in ground water, respectively. Table 4 lists available ground water analytical data for MDI, TDI and related compounds. These latter data were related verbally by the laboratory and are not included in Appendix C.

The highest concentrations of VOCs and semivolatile organic compounds were detected in Well W-3. Four (4) VOC compounds (1,1-dichloroethane, 1,1,1-trichloroethane, toluene, and xylene), seven (7) semivolatile compounds (naphthalene, fluorene, phenanthrene, pyrene, benz(a)anthracene, chrysene, and 2-methyl-4-6-dinitrophenol), and PCB-1254 were detected at this well. During the drilling of this well, a "heavy" oil presence was noted, and prior to development an approximate 6-inch separate oil phase was thought to exist on top of the water table. Ground water at Well W-4 had the next highest level of VOC and semivolatile compounds present in the ground water. Because of the high detection limits required for ground water samples from Well W-3, it is possible that many of the compounds detected in ground water of Well W-4 at low concentration are also present in ground water at Well W-3. However, many compounds were not detected in ground water at Well W-4 but were detected in Well W-3. These included: 1,1-dichloroethane, 1,1,1-trichloroethane, naphthalene, fluorene, and PCB-1254. VOCs were also detected at Well W-2, however, no semivolatile compounds or PCBs were detected in the ground water of this well. The differences in both the nature and concentration of ground water at Well W-3 and Well W-2 suggest a low degree of contaminant migration between these two locations. Only one VOC was detected in low concentration at each of Wells W-1 and W-5. In each well, the VOC was detected during one round of ground water sampling and not in the other.

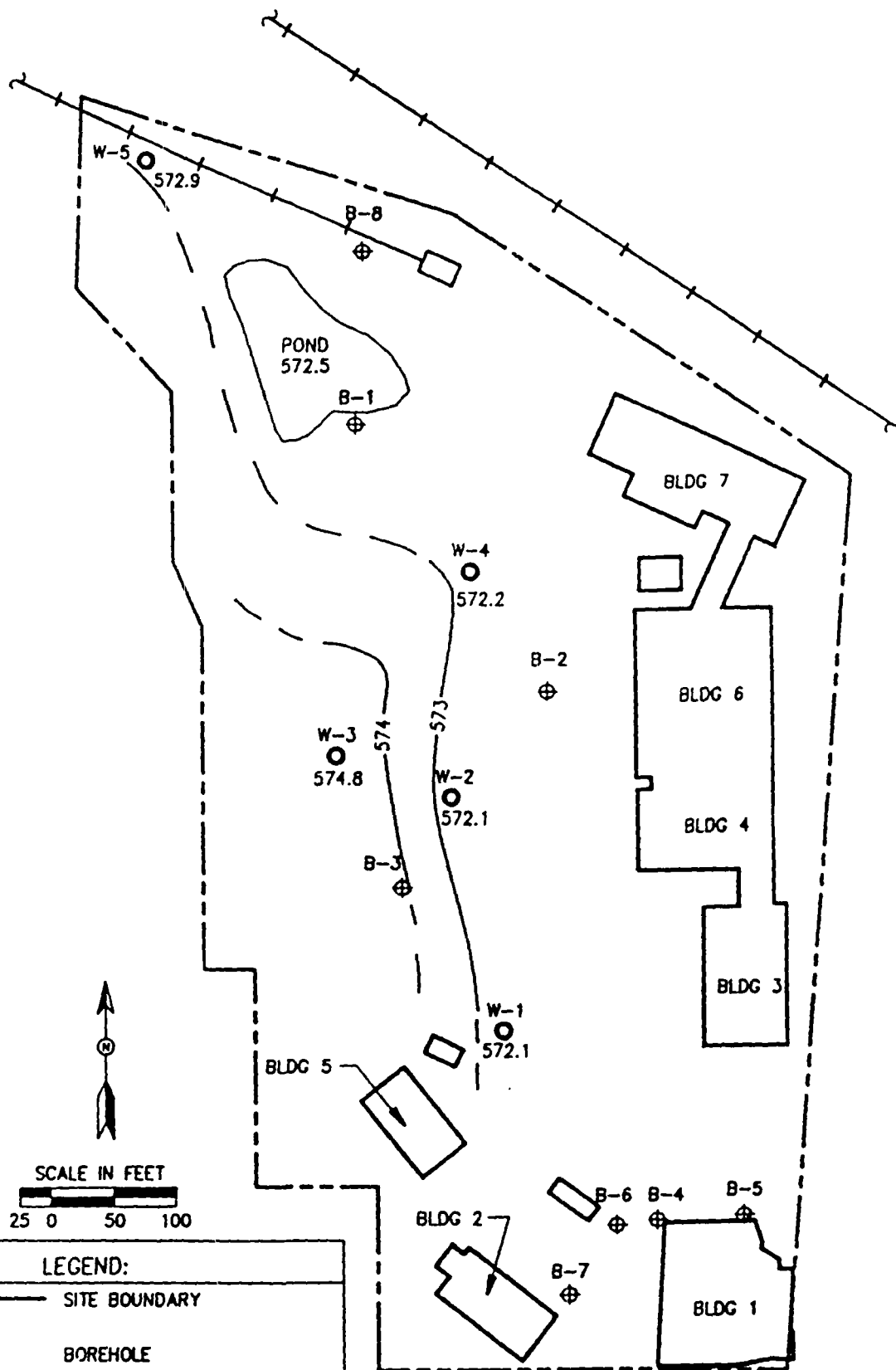
Lastly, the highest concentrations of TDI related compounds were detected in Well W-3 in the form of 2,4-TDA and 2,6-TDA but TDI and MDI related compounds were also detected in Well W-4 including 2,4-TDA, 2,6-TDA, and 4,4'-MDA. A reportable quantity of 2,6-TDA was also measured in ground water at Well W-2.

### 2.1.3 Water Level Elevation Data

Figure 3 shows water level elevation data as measured on July 22, 1988. The water level data suggest that the ground water in the quarry area fill is in communication with the ground water in the dolomite bedrock. Contours of equal water level elevation indicate an easterly direction of ground water flow in the southern two-thirds of the property with a potential northeastern flow component in the northern one-third of the property. Water level data also suggest that the pond in the northwest portion of the property may have been a ground water discharge area under the hydrologic conditions that existed at the site on the above date. Neither the orientation of the ground water contours nor the potential functioning of the pond as a ground water discharge area is unexpected given the orientation of adjacent surface drainage and the highly evaporative conditions which existed at the site through much of the early summer, respectively.

### 2.1.4 Pond/Sediment Sampling and Analysis

As previously noted, a pond exists in the northwest portion of the site and is apparently a remnant of the former quarry area. The pond and its adjacent area have been used for the surface disposal of various appliances, lumber, tires, and miscellaneous debris. One round of surface water (SW-1) and sediment (SD-1) sampling was conducted in the pond. Samples were analyzed for the volatile, semivolatile, inorganic, and PCB parameters on the TCL. In addition, samples were also analyzed for fats, oil and grease and MDI, TDI and related compounds. No volatile, semivolatile, or PCB compounds were detected in either the surface water or the sediment samples. A related MDI compound, methylene bisphenyl-4,4'-diamine may have been present below the



# LEGEND:

- SITE BOUNDARY
- B-7
- ⊕ BOREHOLE
- W-1
- WELL
- 572.1
- 572.1 WATER LEVEL ELEVATION OF 7/22/88 (FT.-AMSL)
- 573 --- CONTOUR OF EQUAL WATER LEVEL ELEVATION (DASHED WHERE APPROXIMATE)
- DRAWINGS ARE APPROXIMATE

INSTA-FOAM PRODUCTS, INC.  
CREST HILL, IL  
WATER LEVEL ELEVATION DATA

ERM ERM-North Central, Inc.

FIGURE

3

9/1/88

CR



quantification limit (20 ug/l) in the surface water sample. These negative results are unexpected in that upon collection of the sediment samples, a visible hydrocarbon sheen was observed. Appendix C.3 contains the complete analytical results of the surface water and sediment analysis.

## 2.2 Building No. 1 Fill Borings

It had been reported that Building No. 1 is possibly situated atop a different kind of fill than that which was disposed in the quarry area. This was investigated by drilling four (4) borings, designated B-4 through B-7, as close as possible to the foundation as indicated on Figure 1. Samples were screened using an HNu photoionization meter as described above for the quarry area borings. One composite sample from each boring was collected on the basis of the organic vapor detection level and/or visual observation of selected waste materials. Collected samples were analyzed for the volatile, semivolatile, and inorganic parameters on the TCL and selectively for PCBs, fats, oil and grease and the hydrocarbon scan. Trichloroethane was detected in the sample collected from Boring B-4 in the interval of 1.5 to 6 feet below ground surface. No other organic compounds were detected in any of the Building No. 1 fill borings.

## 2.3 MDI Spill Areas

Several areas were identified during site reconnaissance where MDI products had spilled onto the land surface. One of these areas was located just south of the railroad spur on the northern portion of the site near where these products are transferred from railroad cars to the Insta-Foam facility via pipeline. One

shallow boring designated B-8 was advanced at this location to determine the subsurface extent of MDI and also TDI, since it had formerly been used at the site, beneath this area. A composite sample was collected in the depth interval of 0 to 2.5 feet below the land surface. Neither TDI nor its related compounds were detected in this sample. MDI analytical results for this sample are incomplete at this time, however, an MDI related compound (4,4'-MDA) was not measured above the detection limit (0.2 ug/g).